

GenCore version 5.1.6
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Om protein - protein search, using bw model

Run on: November 23, 2005, 04:51:33 ; Search time 189 Seconds
(without alignments)
53.469 Million cell updates/sec

Title: US-09-164-223-2
Perfect score: 123
Sequence: 1 PSQASSQARMFPNAPYLPSCLE 23

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 419378781 residues
Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0
Maximum DB seq length: 0
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

A_Geneseq_21:*
1: geneseq1980s: *
2: geneseq1990s: *
3: geneseq2000s: *
4: geneseq2001s: *
5: geneseq2002s: *
6: geneseq2003as: *
7: geneseq2003bs: *
8: geneseq2004as: *
9: geneseq2005s: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description	RESULT 1	ALIGNMENTS
1	123	100.0	23	3 AAY98502	AAV98502	
2	123	100.0	23	3 AAY98503	AAV98502 standard; peptide; 23 AA.	
3	123	100.0	23	4 AAG61834	XX	
4	123	100.0	23	4 AAG61835	AC	
5	123	100.0	23	4 AAU68001	AAV98502;	
6	123	100.0	23	4 AAU68002	XX	
7	123	100.0	23	5 ABG33072	31-JUL-2000 (first entry)	
8	123	100.0	23	5 ABG33071	XX	
9	123	100.0	23	7 ADB67204	Human WTL peptide SEQ ID NO:2.	
10	123	100.0	23	7 ADB67205	XX	
11	123	100.0	23	7 ADJ80437	WTI; immunotherapy; immunogenic; malignant disease; cancer; leukaemia; metastatic disease; mouse; human; Wilm's tumour; immune response; vaccine.	
12	123	100.0	23	7 ADJ80438	OS Homo sapiens.	
13	123	100.0	23	8 ADJ83357	XX	
14	123	100.0	23	8 ADJ83358	PN WO2001018795-A2.	
15	123	100.0	23	8 ADL57246	XX	
16	123	100.0	23	8 ADL57245	PD 06-APR-2000.	
17	123	100.0	23	8 ADU08800	XX	
18	123	100.0	23	8 ADU08801	PR 30-SEP-1998; 98US-00164223.	
19	123	100.0	23	8 ADU08801	PR 25-MAR-1999; 99US-00276484.	
20	123	100.0	152	7 ADU67545	PA (CORI-) CORIXA CORP.	
21	123	100.0	152	7 ADU67778	PA (GAIG-/ GAIGER A.	
22	123	100.0	152	8 ADU73698	PI Gaiger A, Cheever M;	
23	123	100.0	152	8 ADU73696	XX	
24	123	100.0	152	8 ADU09141	DR WPI; 2000-29310725.	

The present invention describes polypeptides (I) comprising an immunogenic portion of a native Wilm's tumour gene product polypeptide, associated with WTL expression e.g. leukemia or cancer. Claim 4; Page 46; 193pp; English.

Novel polypeptides comprising an immunogenic portion of a native WTL polypeptide, useful for inhibiting the development of malignant diseases associated with WTL expression e.g. leukemia or cancer.

The present invention describes polypeptides (I) comprising an immunogenic portion of a native Wilm's tumour gene product polypeptide, (or variants of the immunogenic portion retaining the ability to react with WTL-specific antisera and/or T-cell lines or clones) and comprising 16 consecutive amino acids (aa) or less of a native WTL polypeptide. The polypeptides are useful therapeutically and to manufacture medicaments for enhancing inducing an immune response in patients. The polypeptides, mimetics or poly nucleotides can be included with a carrier/exipient in pharmaceutical compositions or with a non-

Raw47175 Wilm's tu
Aag78445 Amino aci
Abg7422 Human WIL
Aar8566 Wilm's tu
Aaw22883 Wilm's tu
Abg33395 Human WTL
Adb67537 Human Wil
Aej80830 Wilm's tu
Adj8750 Human WR-
Adl5763 Human Wil
Aeo09193 Human WTL
Abg33384 Human WTL
Adb67537 Human Wil
Aej80770 Wilm's tu
Adj83690 Human WTL
Adl5779 Human WT-
Aeo09133 Human WTL
Adj80913 Wilm's tu
Adl57721 Human Wil
Aeo09276 Coon Opt
Adj80937 Wilm's tu

CC	enhance or induce an immune response specific for WTI or a cell
CC	expressing WTI, useful to inhibit the development of malignant diseases
CC	associated with WTI expression, e.g. leukemia (especially acute/chronic
CC	myeloid leukemia or acute lymphocytic leukemia) or cancer (especially
CC	breast, lung, thyroid or gastrointestinal cancer, or a melanoma).
CC	AKV98501 to AAH98811 represent polypeptide sequences, and AAA13848 to
CC	AAA13862 represent PCR primers, used in the exemplification of the
CC	present invention.
SQ	Sequence 23 AA:
	Query Match 100.0%; Score 123; DB 3; Length 23;
	Best Local Similarity 100.0%; Pred. No. 1.4e-12; Mismatches 0; Indels 0; Gaps 0;
	Matches 23; Conservative 0; MisMatches 0; Indels 0; Gaps 0;
OY	1 PSQASGQARMFPNAPYLPSCLE 23
Db	1 PSQASGQARMFPNAPYLPSCLE 23
	RESULT 3
ID	AAG61834 standard; peptide; 23 AA.
AC	AAG61834;
XX	
DT	06-JUL-2001 (first entry)
DE	Human WTI immunogenic peptide SEQ ID NO: 2.
XX	
KW	Human; mouse; immunotherapy; cancer; leukaemia; WTI; Wilms' tumour gene;
XX	
KW	chromosome 11p13; zinc finger transcription factor.
OS	Homo sapiens.
XX	
PN	WO200125273-A2.
XX	
PD	12-APR-2001.
XX	
PR	04-OCT-2000; 2000WO-US027465.
XX	
PR	04-OCT-1999; 99US-0157459P.
XX	
PA	(CORI-) CORIXA CORP.
XX	
PT	Skiaky YAW, XU J, Cheever MA, Reed SC;
XX	
DR	WPI, 2001-328324/34.
XX	
PT	Polypeptide comprising part of the Wilms Tumor gene product sequence is used in the diagnosis and treatment of malignant diseases e.g. leukemia and cancer associated with WTI.
XX	
PS	Claim 4; Page 155; 228pp; English.
XX	
CC	The present invention describes compositions comprising peptides derived from the Wilms' tumour protein WTI and methods for their use in treating malignant diseases. Peptides derived from both the murine and human WTI proteins are provided. The human WTI gene is found on chromosome 11p13, and the protein was shown to be a zinc finger transcription factor. The immunogenic peptides of the invention are particularly useful in the diagnosis and treatment of cancer and leukaemia. The present sequence is a polypeptide described in the exemplification of the invention
CC	Sequence 23 AA:
	Query Match 100.0%; Score 123; DB 4; Length 23;
	Best Local Similarity 100.0%; Pred. No. 1.4e-12; Mismatches 0; Indels 0; Gaps 0;
	Matches 23; Conservative 0; MisMatches 0; Indels 0; Gaps 0;
OY	1 PSQASGQARMFPNAPYLPSCLE 23
Db	1 PSQASGQARMFPNAPYLPSCLE 23

RESULT 4	XX	XX	XX
ID AAG61835	XX	XX	XX
AC AAG61835;	XX	XX	XX
CC XX	XX	XX	XX
DT 06-JUL-2001 (first entry)	XX	XX	XX
DE Mouse Wt1 immunogenic peptide SEQ ID NO: 3.	XX	XX	XX
KW Human; mouse; immunotherapy; cancer; leukaemia; Wt1; Wilm's tumour gene; chromosome 11p13; zinc finger transcription factor.	XX	XX	XX
OS Mus musculus.	XX	XX	XX
PN WO200125273-A2.	PS	PS	PS
PD 12-APR-2001.	XX	XX	XX
PR 04-OCT-2000; 2000WO-US027465.	XX	XX	XX
PR 04-OCT-1999; 99US-0157459P.	XX	XX	XX
PA (CORI-) CORIXA CORP.	XX	XX	XX
PI Cheever MA, Gaiger A;	XX	XX	XX
DR WPI; 2001-648218/74.	XX	XX	XX
PT Composition for the treatment of mesothelioma comprises specific peptides i.e. Wilm's tumor antigen polypeptide derived antigenic fragments.	XX	XX	XX
PS Claim 1; Page 24; 24pp; English.	XX	XX	XX
CC The invention relates to the use of a composition comprising at least a first isolated peptide, of between 9 and 40 amino acids or a first nucleic acid, encoding the peptide, in the manufacture or a medicament for treating or preventing mesothelioma. The peptides are antigenic peptides derived from the Wilm's tumour protein Wt1. The composition is useful for the treatment of mesothelioma, Wilm's tumour, preferably pleural mesothelioma and other Wt1 associated malignancies e.g. leukaemia (including acute myeloid leukaemia, AML, chronic myeloid leukaemia, CML, acute lymphocytic leukaemia, ALL, and childhood ALL), myelodysplastic syndromes, myeloproliferative syndromes and cancers (e.g. breast, testicular, prostate, lung and ovarian) in mammals, preferably humans. The present sequence is an antigenic peptide of the invention derived from human Wt1	CC	CC	CC
SQ Sequence 23 AA:	XX	XX	XX
XX Query Match 100.0%; Score 123; DB 4; Length 23; Best Local Similarity 100.0%; Pred. No. 1.4e-12; Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	XX	XX	XX
QY 1 PSQASSGQARMFPNAPYLPSCLE 23	QY 1 PSQASSGQARMFPNAPYLPSCLE 23	QY 1 PSQASSGQARMFPNAPYLPSCLE 23	QY 1 PSQASSGQARMFPNAPYLPSCLE 23
Db	Db	Db	Db
RESULT 5	XX	XX	XX
ID AAU68601	XX	XX	XX
AC AAU68601;	XX	XX	XX
CC XX	XX	XX	XX
DT 16-JAN-2002 (first entry)	XX	XX	XX
DE Mouse Wilm's tumour protein, Wt1, antigenic peptide #1.	XX	XX	XX
KW Mouse; Wilm's tumour; Wt1; pleural mesothelioma; antigen; leukaemia; acute myeloid leukaemia; AML; chronic myeloid leukaemia; CML; acute lymphocytic leukaemia; ALL; myelodysplastic syndromes; myeloproliferative syndrome; cancer; cytostatic.	XX	XX	XX
OS Mus musculus.	OS	OS	OS
PN WO200162920-A2.	PN	PN	PN
PD 30-AUG-2001.	XX	XX	XX
PP 22-FEB-2001; 2001WO-US005702.	XX	XX	XX
PR 22-FEB-2000; 2000US-0184070P.	XX	XX	XX
PA (CORI-) CORIXA CORP.	XX	XX	XX
PI Cheever MA, Gaiger A;	XX	XX	XX

Example 3; Page 155; 228pp; English.

The present invention describes compositions comprising peptides derived from the Wilm's tumour protein Wt1 and methods for their use in treating malignant disease. Peptides derived from both the murine and human Wt1 proteins are provided. The human Wt1 gene is found on chromosome 11p13, and the protein was shown to be a zinc finger transcription factor. The immunogenic peptides of the invention are particularly useful in the diagnosis and treatment of cancer and leukaemia. The present sequence is a polypeptide described in the exemplification of the invention

XX PS Example 3; Page 155; 228pp; English.

XX The present invention describes compositions comprising peptides derived from the Wilm's tumour protein Wt1 and methods for their use in treating malignant disease. Peptides derived from both the murine and human Wt1 proteins are provided. The human Wt1 gene is found on chromosome 11p13, and the protein was shown to be a zinc finger transcription factor. The immunogenic peptides of the invention are particularly useful in the diagnosis and treatment of cancer and leukaemia. The present sequence is a polypeptide described in the exemplification of the invention

XX PS Example 3; Page 155; 228pp; English.

XX The present invention describes compositions comprising peptides derived from the Wilm's tumour protein Wt1 and methods for their use in treating malignant disease. Peptides derived from both the murine and human Wt1 proteins are provided. The human Wt1 gene is found on chromosome 11p13, and the protein was shown to be a zinc finger transcription factor. The immunogenic peptides of the invention are particularly useful in the diagnosis and treatment of cancer and leukaemia. The present sequence is a polypeptide described in the exemplification of the invention

XX PS Example 3; Page 155; 228pp; English.

XX The present invention describes compositions comprising peptides derived from the Wilm's tumour protein Wt1 and methods for their use in treating malignant disease. Peptides derived from both the murine and human Wt1 proteins are provided. The human Wt1 gene is found on chromosome 11p13, and the protein was shown to be a zinc finger transcription factor. The immunogenic peptides of the invention are particularly useful in the diagnosis and treatment of cancer and leukaemia. The present sequence is a polypeptide described in the exemplification of the invention

XX PS Example 3; Page 155; 228pp; English.

XX The present invention describes compositions comprising peptides derived from the Wilm's tumour protein Wt1 and methods for their use in treating malignant disease. Peptides derived from both the murine and human Wt1 proteins are provided. The human Wt1 gene is found on chromosome 11p13, and the protein was shown to be a zinc finger transcription factor. The immunogenic peptides of the invention are particularly useful in the diagnosis and treatment of cancer and leukaemia. The present sequence is a polypeptide described in the exemplification of the invention

XX PS Example 3; Page 155; 228pp; English.

XX The present invention describes compositions comprising peptides derived from the Wilm's tumour protein Wt1 and methods for their use in treating malignant disease. Peptides derived from both the murine and human Wt1 proteins are provided. The human Wt1 gene is found on chromosome 11p13, and the protein was shown to be a zinc finger transcription factor. The immunogenic peptides of the invention are particularly useful in the diagnosis and treatment of cancer and leukaemia. The present sequence is a polypeptide described in the exemplification of the invention

XX PS Example 3; Page 155; 228pp; English.

XX
XX WPI; 2001-648218/74.
DR
PT Composition for the treatment of mesothelioma comprises specific peptides
XX i.e. Wilms' tumor antigen polypeptide derived antigenic fragments.

XX PS Claim 1; Page 24; 242pp; English.
CC The invention relates to the use of a composition comprising at least a
CC first isolated peptide, or between 9 and 40 amino acids or a first
nucleic acid, encoding the peptide, in the manufacture of a medicament
CC useful for the treatment of mesothelioma. The peptides are antigenic
peptides derived from the Wilms' tumour protein WT1. The composition is
CC particularly useful for the treatment of mesothelioma. Wilms' tumour, preferentially
CC plural mesothelioma and other WT1 associated mesothelioma (including acute lymphocytic leukaemia, ALL, and childhood AML), myelodysplastic
CC syndromes, myeloproliferative syndromes and cancers (e.g. breast,
CC testicular, prostate, lung and ovarian) in mammals, preferably humans.
CC The present sequence is an antigenic peptide of the invention derived
XX from mouse WT1

SQ Sequence 23 AA:
Query Match 100.0%; Score 123; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 1.4e-12;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 PSQASSGQARMFPNAPYPLPSCLE 23
Db 1 PSQASSGQARMFPNAPYPLPSCLE 23

RESULT 7
ABG33072
ID ABG33072 standard; peptide; 23 AA.
XX
AC ABG33072;
XX
DT 15-JUL-2002 (first entry)
XX
DE Mouse WT1 immunogenic peptide #1.
XX Human; mouse; cytostatic; immunostimulant; WT1; cancer; immune response.
XX
OS Homo sapiens.
XX
PN WO200228414-A1.
XX
PD 11-APR-2002.
XX
PP 03-OCT-2001; 2001WO-US031139.
XX
PR 06-OCT-2000; 2000US-00884361.
PR 09-OCT-2000; 2000US-0085830.
PR 15-FEB-2001; 2001US-00785019.
PR 24-AUG-2001; 2001US-00938864.
XX
PA (CORI-) CORIXA CORP.
PA (GAIG-) GAIGER A.
XX
PI Gaiger A, Mcneill PD, Smithgall M, Moulton G, Vedvick TS;
PI Sleath PR, Moosman S, Evans L, Spies AG, Boydston J;
XX
DR WO200228414-A1.
XX
PD 11-APR-2002.
XX
PP 03-OCT-2001; 2001WO-US031139.
XX
PR 06-OCT-2000; 2000US-00684361.
PR 09-OCT-2000; 2000US-0068530.
PR 15-FEB-2001; 2001US-00785019.
PR 24-AUG-2001; 2001US-00938864.
XX
PA (CORI-) CORIXA CORP.
PA (GAIG-) GAIGER A.

XX
PT Gaiger A, Mcneill PD, Smithgall M, Moulton G, Vedvick TS;
PT Sleath PR, Moosman S, Evans L, Spies AG, Boydston J;
XX
DR WPI; 2002-352217/38.
XX
PT Novel isolated WT1 polynucleotide, and encoded polypeptide, useful for
PT treating and diagnosing cancer in a patient.
XX
PS Example 3; Page 165; 260pp; English.
XX
CC The invention relates to an isolated WT1 polynucleotide (I) and
CC polypeptide encoded by (I). The WT1 polynucleotides and polypeptides are
CC used for treating and detecting cancer in a patient, and for stimulating
CC an immune response in a patient. ABG33070-ABG33405 represent WT1 amino acid
CC sequences of the invention
XX
SQ Sequence 23 AA:
Query Match 100.0%; Score 123; DB 5; Length 23;
Best Local Similarity 100.0%; Pred. No. 1.4e-12;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 PSQASSGQARMFPNAPYPLPSCLE 23
Db 1 PSQASSGQARMFPNAPYPLPSCLE 23

RESULT 8
ABG33071
ID ABG33071 standard; peptide; 23 AA.
XX
AC ABG33071;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human WT1 immunogenic peptide #2.
XX Human; mouse; cytostatic; immunostimulant; WT1; cancer; immune response.
XX
OS Homo sapiens.
XX
PN WO200228414-A1.
XX
PD 11-APR-2002.
XX
PP 03-OCT-2001; 2001WO-US031139.
XX
PR 06-OCT-2000; 2000US-00884361.
PR 09-OCT-2000; 2000US-0085830.
PR 15-FEB-2001; 2001US-00785019.
PR 24-AUG-2001; 2001US-00938864.
XX
PA (CORI-) CORIXA CORP.
PA (GAIG-) GAIGER A.
XX
PI Gaiger A, Mcneill PD, Smithgall M, Moulton G, Vedvick TS;
PI Sleath PR, Moosman S, Evans L, Spies AG, Boydston J;
XX
DR WO200228417/38.
XX
PT Novel isolated WT1 polynucleotide, and encoded polypeptide, useful for
PT treating and diagnosing cancer in a patient.
XX
PS Example 3; Page 165; 260pp; English.
XX
CC The invention relates to an isolated WT1 polynucleotide (I) and
CC polypeptide encoded by (I). The WT1 polynucleotides and polypeptides are
CC used for treating and detecting cancer in a patient, and for stimulating
CC an immune response in a patient. ABG33070-ABG33405 represent WT1 amino acid
CC sequences of the invention
XX
SQ Sequence 23 AA:
Query Match 100.0%; Score 123; DB 5; Length 23;
Best Local Similarity 100.0%; Pred. No. 1.4e-12;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 PSQASSGQARMFPNAPYPLPSCLE 23
Db 1 PSQASSGQARMFPNAPYPLPSCLE 23

RESULT 9
ADB67204
ID ADB67204 standard; peptide; 23 AA.

XX
PT Novel isolated WT1 polynucleotide, and encoded polypeptide, useful for
PT treating and diagnosing cancer in a patient.
XX
PS Example 3; Page 165; 260pp; English.
XX
CC The invention relates to an isolated WT1 polynucleotide (I) and
CC polypeptide encoded by (I). The WT1 polynucleotides and polypeptides are

CC used for treating and detecting cancer in a patient, and for stimulating
CC an immune response in patient. ABG33070-ABG33405 represent WT1 amino acid
CC sequences of the invention

AC	ADB67204;
XX	04 -DESC-2003 (first entry)
XX	DE Human/mouse WTL antigenic peptide #1.
XX	KW Human; Wilm's tumour antigen; WTL; cytotoxic; antigen; T cell; antigen-presenting cell; CD4+; CD8+; immune response; cancer; vaccine; leukaemia; antigen.
XX	KW
OS	Homo sapiens.
OS	Mus musculus.
XX	US2003072767-A1.
XX	PN
PD	XX
PR	17-APR-2003.
PR	XX
PR	24-AUG-2001; 2001US-00938864.
PR	XX
PR	30-SEP-1998; 98US-00164223.
PR	25-MAR-1999; 99US-00276484.
PR	06-OCT-2000; 2000US-00684361.
PR	09-OCT-2000; 2000US-00684830.
PR	15-FEB-2001; 2001US-00785019.
PA	XX
PA	(GAIG/) GAIGER A.
PA	(MCNE/) MCNEILL P D.
PA	(SMIT/) SMITHGALL M.
PA	(MOUL/) MOULTON G.
PA	(VEDV/) VEDVICK T S.
PA	(SLEA/) SLEATH P R.
PA	(MOSS/) MOSSMAN S.
PA	(EVAN/) EVANS L.
PA	(SPIE/) SPIES A G.
PA	(BOYD/) BOYDSTON J.
PT	XX
PT	Gaiger A, Mcneill PD, Smithgall M, Moulton G, Vedvick TS, Sleath PR, Moesman S, Evans L, Spies AG, Boydston J;
PT	XX
DR	WPI; 2003-605957/57.
XX	PT Novel Wilms tumor polynucleotides encoding WTL polypeptides, useful for detecting the presence of cancer in a patient, and in pharmaceutical compositions, e.g. vaccines, for treating cancers e.g. leukemia.
XX	PT
RS	XX
RS	The invention relates to an isolated Wilm tumour (WTL) polynucleotide comprising a full length protein, truncated protein, mutated protein or fusion protein. Also included are the encoded WTL proteins, expression vectors, host cells, antibodies, detecting the presence of a cancer in a patient by contacting a biological sample with a binding agent that binds to a WTL protein, an oligonucleotide that hybridizes to a WTL polynucleotide, stimulating and/or expanding T cells specific for a tumour protein by contacting T cells with the WTL polynucleotide, the WTL protein or antigen-presenting cells that express the WTL protein, a composition (C1) (comprising physiologically acceptable carriers and immunostimulants as first component, and a second component selected from the WTL polynucleotide, the WTL protein, Ab, or T cells and antigen presenting cells that express the WTL protein), inhibiting the development of a cancer in a patient (by incubating CD4+ and/or CD8+ T cells isolated from a patient with the WTL polynucleotide, the WTL protein or antigen presenting cells that express the WTL protein, such that T cell proliferate, administering the proliferated T cells to the patient, and thus inhibiting the development of a cancer in the patient) and a composition (C2) (comprising a WTL polypeptide suspended in a buffer comprising at least 1-3 sugars selected from trehalose, maltose, sucrose, fructose and glucose, at a concentration of 7-13% and optionally ethanolamine, cysteine and Polysorbate-80, or WTL polypeptide and MPL-SE or Enhanzym). Also disclosed as anew are polypeptides comprising a portion of an immunogenic portion of WTL polypeptide. C1 is useful for stimulating immune response in a patient, and for treating

CC cancer in a patient. The oligonucleotide is also useful for determining the presence of a cancer in a patient. The WTI polynucleotide and the WTI protein are useful in pharmaceutical compositions, e.g. vaccines. the WTI protein is useful as marker to indicate the presence or absence of a cancer. C1 is useful for inhibiting the development of a malignant disease in a patient, for preventing and treating metastatic diseases e.g. leukaemia and cancer, and for removing tumour cells from a biological sample. Ab (binding agent for the WTI protein) is useful for detecting the presence of cancer in a patient. The present sequence is a human WTI antigenic peptide.

Query Match 100%; Score 123; DB 7; Length 23;
 Best Local Similarity 100.0%; Pred. No. 1.4e-12;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY	Db
1	PSQASSGQARMFPNAPYPLPSCLE 23
1	PSQASSGQARMFPNAPYPLPSCLE 23

RESULT 10
ADB67205
ID ADB67205 Standard; peptide; 23 AA.
vv

AC
XX
DT
XX
04-DEC-2003 (first entry)
Audi 205;

XX Human; Wilm's tumour antigen; WT1; cytostatic; antigen; T cell;
KW antigen-presenting cell; CD4+; CD8+; immune response; cancer; vaccine;
KW leukaemia; antigen.

OS Homo sapiens.
OS Mus musculus.
XX
PN

PD 17-APR-2003.
XX
PF 24-AUG-2001; 2001US-00938864

PR	30-SEP-1998;	98US-00164223
PR	25-MAR-1999;	99US-00276484
PR	06-OCT-2000;	2000US-00684361
PR	09-OCT-2000;	2000US-00685830

Novel Wilms tumor polynucleotides encoding WTI polypeptides, useful for detecting the presence of cancer in a patient, and in pharmaceutical compositions, e.g. vaccines, for treating cancers e.g. leukemia.

comprising a full length protein, truncated protein, mutated protein or fusion protein. Also included are the encoded WT1 proteins, expression vectors, host cells, antibodies, detecting the presence of a cancer in a patient by contacting biological sample with a binding agent that binds to a WT1 protein, an oligonucleotide that hybridises to a WT1 polynucleotide, stimulating and/or expanding T cells specific for a tumour protein by contacting T cells with the WT1 polynucleotide, the WT1 protein or antigen-presenting cells that express the WT1 protein, a composition (C1) comprising physiologically acceptable carriers and immunostimulants as first component, and a second component selected from the WT1 polynucleotide, the WT1 protein, Ab, or T cells and antigen presenting cells that express the WT1 protein, inhibiting the development of a cancer in a patient by incubating CD4+ and/or CD8+ T cells isolated from a patient with the WT1 polynucleotide, the WT1 protein or antigen presenting cells that express the WT1 protein, such that T cell proliferate, administering the proliferated T cells to the patient, and thus inhibiting the development of a cancer in the patient) and a composition (C2) comprising a WT1 polypeptide resuspended in a buffer comprising at least 1-3 sugars selected from trehalose, maltose, sucrose, fructose and glucose, at a concentration of 7-13%, and optionally ethanolamine, citrulline and Polysorbate-80, or WT1 polypeptide and MPL-SE or Enhanzym. Also disclosed as anew are polypeptides comprising a variant of an immunogenic portion of WT1 polypeptide, useful for stimulating immune response in a patient, and for treating

The invention relates to an isolated Wilm tumour (WT1) polynucleotide comprising a full length protein, truncated protein, mutated protein or fusion protein. Also included are the encoded WT1 proteins, expression vectors, host cells, antibodies, detecting the presence of a cancer in a patient by contacting a biological sample with a binding agent that binds to a WT1 protein, an oligonucleotide that hybridises to a WT1 polynucleotide, stimulating and/or expanding T cells specific for a tumour protein by contacting T cells with the WT1 polynucleotide, the WT1 protein or antigen-presenting cells that express the WT1 protein, a composition (C1) (comprising physiologically acceptable carriers and immunostimulants as first component, and a second component selected from the WT1 polynucleotide, the WT1 protein, Ab or T cells and antigen presenting cells that express the WT1 protein), inhibiting the development of a cancer in a patient (by incubating CD4+ and/or CD8+ T cells isolated from a patient with the WT1 polynucleotide, the WT1 protein or antigen presenting cells that express the WT1 protein, such that T cell proliferate), administering the proliferated T cells to the patient, and thus inhibiting the development of a cancer in the patient and a composition (C2) (comprising a WT1 polypeptide resuspended in a buffer comprising at least 1-3 sugars selected from trehalose, maltose, sucrose, fructose and glucose, at a concentration of 7-13%, and optionally ethanolamine, cysteine and polysorbate-80, or WT1 polypeptide comprising a variant of an immunogenic portion of WT1 polypeptide C1 is useful for stimulating immune response in a patient, and for treating cancer in a patient. The oligonucleotide is also useful for determining the presence of a cancer in a patient. The WT1 polynucleotide and the WT1 protein are useful in pharmaceutical compositions, e.g. vaccines. The WT1 protein is useful as marker to indicate the presence or absence of a cancer. C1 is useful for inhibiting the development of a malignant disease in a patient, for preventing and treating metastatic diseases e.g. leukemia and cancer, and for removing tumour cells from a biological sample. Ab (binding agent for the WT1 protein) is useful for detecting the presence of cancer in a patient. The present sequence is a human WT1 antigenic peptide.

SQ Sequence 23 AA:

Query	Match Best Local Similarity	Score 100.0%	DB 123;	Length 7;	DB 100.0%;	Pred. No. 1.4e-12;	Length 23;
	Matches 23;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0		
QY	1	PSQASSGQARMFPNAPVLPSCLE 23					
DB	1	PSQASSGQARMFPNAPVLPSCLE 23					

RESULT 11

ID ADJ80437	standard; peptide; 23 AA.
XX	
AC ADJ80437;	
XX	
DT 06-MAY-2004	(first entry)
XX	
DE Wil'm's tumor antigen immunogenic peptide #2.	
XX	
KW cytostatic; gene therapy; vaccine; Wil'm's tumor antigen; WT1; cancer;	
XX	
OS Homo sapiens.	
XX	
PN WO2003037060-A2.	
XX	
PD 08-MAY-2003.	
PF 30-OCT-2002; 2002WO-US0035194.	
PR 30-OCT-2001; 2001US-00002603.	
PR 16-APR-2002; 2002US-00125335.	
PR 12-JUL-2002; 2002US-00195835.	
PR 16-SEP-2002; 2002US-00244830.	
XX	

PA
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CC
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CC
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CC
SQ

(CORI-) CORIXA CORP.
(GAIG/) GAIGER A.

Gaiger A, Mcneill PD, Jaya N, Carter D;
WPI: 2003-430453/40.

New isolated polypeptide for diagnosing, preventing or treating malignant diseases, e.g. cancer or leukemia, comprises an immunogenic portion of a Wilms tumor antigen.

Disclosure: SEQ ID NO 2; 371PP; English.

The invention relates to an isolated polypeptide comprising an immunogenic portion of a Wilms tumor antigen, or its variant that differs in one or more substitutions, deletions, additions and/or insertions, such that the ability of the variant to react with Wilms specific antisera and/or T-cell lines or clones is not substantially diminished. The composition and methods are useful in diagnosing, preventing or treating malignant disease, such as cancer or leukemia. This sequence represents a peptide of the invention.

sequence 23 AA;

CC immunogenic portion of a Wilms tumor antigen, or its variant that
 CC differs in one or more substitutions, deletions, additions and/or
 CC insertions, such that the ability of the variant to react with WTI-
 CC specific antisera and/or T-cell lines or clones is not substantially
 CC diminished. The composition and methods are useful in diagnosing/
 CC preventing or treating malignant diseases, such as cancer or leukemia.
 XX This sequence represents a peptide of the invention.

SQ Sequence 23 AA;

Query Match 100.0%; Score 123; DB 7; Length 23;
 Best Local Similarity 100.0%; Pred. No. 1.4e-12; Mismatches 0; Indels 0; Gaps 0;

Oy 1 PSQASSQARMFNPNAVLPSCLE 23
 Db 1 PSQASSQARMFNPNAVLPSCLE 23

RESULT 13

ID ADJ83357 standard; peptide; 23 AA.
 XX
 AC ADJ83357;
 XX
 DT 06-MAY-2004 (first entry)

DE Human WTI (Wilms tumour) immunogenic peptide - SEQ ID 2.

XX immune response; WTI; Wilms tumour; immunostimulant; cytostatic; vaccine;
 KW malignant disease; leukaemia; cancer; human.
 XX Homo sapiens.
 XX US2003235557-A1.
 XX PD 25-DEC-2003.
 XX PR 16-SEP-2002; 2002US-00244830.
 XX PR 16-SEP-2002; 2002US-00244830.
 XX PR 09-OCT-2000; 2000US-00684361.
 XX PR 09-OCT-2000; 2000US-00684361.
 XX PR 30-SEP-1998; 99US-00164223.
 XX PR 25-MAR-1999; 99US-00276484.
 XX PR 06-OCT-2000; 2000US-00684361.
 XX PR 06-OCT-2000; 2000US-00684361.
 XX PR 09-OCT-2000; 2000US-00684330.
 XX PR 15-FEB-2001; 2001US-0078519.
 XX PR 24-AUG-2001; 2001US-0093864.
 XX PR 30-OCT-2001; 2001US-0002403.
 XX PR 16-APR-2002; 2002US-00125335.
 XX PR 12-JUL-2002; 2002US-00195335.
 XX PA (CORTI-) CORIXA CORP.
 XX PI Gaiger A, Cheever MA;
 XX DR WTI; 2004-070542/07.

XX Inducing an immune response in an animal, useful for treating or
 PT preventing cancer, comprises administering a composition comprising a
 PT viral vector comprising an immunogenic portion of a WTI polynucleotide.

XX Example 1; SEQ ID NO 2; 229pp; English.
 XX
 PS Example 1; SEQ ID NO 3; 239pp; English.
 XX
 CC The invention relates to a novel method for inducing an immune response
 CC in an animal which involves administering a first and a second
 CC composition comprising a first and a second viral vector, respectively,
 CC each having at least an immunogenic portion of a WTI (Wilms tumour)
 CC polynucleotide operably linked to an expression control sequence. The
 CC polynucleotide of the invention has immunostimulant and cytostatic applications
 CC and may be useful for generating or enhancing an immune response to WTI,
 CC possibly via the production of a vaccine, as well as for preventing
 CC and/or treating malignant diseases such as leukaemia and cancer. The
 CC current sequence is that of the murine WTI immunogenic peptide of the
 CC invention.
 XX Sequence 23 AA;

Query Match 100.0%; Score 123; DB 8; Length 23;
 Best Local Similarity 100.0%; Pred. No. 1.4e-12; Mismatches 0; Indels 0; Gaps 0;

Oy 1 PSQASSQARMFNPNAVLPSCLE 23
 Db 1 PSQASSQARMFNPNAVLPSCLE 23

RESULT 14

ID ADJ83358 standard; peptide; 23 AA.
 XX
 AC ADJ83358;
 XX DT 06-MAY-2004 (first entry)

DE Murine WTI (Wilms tumour) immunogenic peptide - SEQ ID 3.

KW immune response; WTI; Wilms tumour; immunostimulant; cytostatic; vaccine;

KW malignant disease; leukaemia; cancer; murine; mouse.

OS Mus musculus.

PN US2003235557-A1.

XX PD 25-DEC-2003.

XX PR 16-SEP-2002; 2002US-00244830.

XX PR 16-SEP-2002; 2002US-00244830.

XX PR 09-OCT-2000; 2000US-00684330.

XX PR 09-OCT-2000; 2000US-00684330.

XX PR 15-FEB-2001; 2001US-0078519.

XX PR 24-AUG-2001; 2001US-0093864.

XX PR 30-OCT-2001; 2001US-0002403.

XX PR 16-APR-2002; 2002US-00125335.

XX PR 12-JUL-2002; 2002US-00195335.

XX PA (CORTI-) CORIXA CORP.

XX PI Gaiger A, Cheever MA;

XX DR WTI; 2004-070542/07.

XX Inducing an immune response in an animal, useful for treating or
 PT preventing cancer, comprises administering a composition comprising a
 PT viral vector comprising an immunogenic portion of a WTI polynucleotide.

XX Example 1; SEQ ID NO 3; 239pp; English.

PS Example 1; SEQ ID NO 2; 229pp; English.
 XX
 PT Inducing an immune response in an animal, useful for treating or
 PT preventing cancer, comprises administering a composition comprising a
 PT viral vector comprising an immunogenic portion of a WTI polynucleotide.
 XX
 PS Example 1; SEQ ID NO 3; 239pp; English.
 XX
 CC The invention relates to a novel method for inducing an immune response
 CC in an animal which involves administering a first and a second
 CC composition comprising a first and a second viral vector, respectively,
 CC each having at least an immunogenic portion of a WTI (Wilms tumour)
 CC polynucleotide operably linked to an expression control sequence. The
 CC polynucleotide of the invention has immunostimulant and cytostatic applications
 CC and may be useful for generating or enhancing an immune response to WTI,
 CC possibly via the production of a vaccine, as well as for preventing
 CC and/or treating malignant diseases such as leukaemia and cancer. The
 CC current sequence is that of the murine WTI immunogenic peptide of the
 CC invention.
 XX Sequence 23 AA;

Query Match 100.0%; Score 123; DB 8; Length 23;
 Best Local Similarity 100.0%; Pred. No. 1.4e-12; Mismatches 0; Indels 0; Gaps 0;

Oy 1 PSQASSQARMFNPNAVLPSCLE 23
 Db 1 PSQASSQARMFNPNAVLPSCLE 23

QY 1 PSQASSGQARMFPNAPYLPSCLE 23
 ID ADL57246 standard; peptide; 23 AA.
 Db 1 PSQASSGQARMFPNAPYLPSCLE 23

RESULT 15

ADL57246
 XX
 AC ADL57246;
 XX DT 20-MAY-2004 (first entry)
 XX DE Mouse Wilms' tumour, WT-1, immunogenic peptide #1.
 XX KW Mouse; Wilms' tumour; WT1; cancer; cytostatic; immunogen; antigen;
 KW vaccine; T-cell; MHC; Major Histocompatibility Complex; HLA-A2;
 KW human leukocyte antigen; Ra12; HIS tag; twin arginine translocator; TAT;
 KW malignant disease.
 XX OS Mus musculus.
 XX PN US2003215458-A1.
 XX PD 20-NOV-2003.
 XX PF 30-OCT-2002; 2002US-00286333.
 XX PR 30-SEP-1998; 98US-00164223.
 PR 25-MAR-1999; 99US-00276484.
 PR 6-OCT-2000; 2000US-00694361.
 PR 09-OCT-2000; 2000US-00695830.
 PR 15-FEB-2001; 2001US-00795019.
 PR 24-AUG-2001; 2001US-00938864.
 PR 30-OCT-2001; 2001US-00002603.
 PR 16-APR-2002; 2002US-00125635.
 PR 12-JUL-2002; 2002US-00195835.
 PR 16-SEP-2002; 2002US-00244830.

CC compositions comprising them may be used for generating or enhancing an
 CC immune response to Wilms' tumour, and for treating and/or preventing
 CC malignant diseases, e.g. cancer. The compositions may be used as markers
 CC for the progression of cancer. The present sequence is a mouse WT1
 CC polypeptide immunogenic peptide.

Sequence 23 AA;

Query Match	Score	DB	Length	Best Local Similarity	Pred.	No.	Mismatches	Indels	Gaps
1 PSQASSGQARMFPNAPYLPSCLE 23	123	8	23	100.0%	0	1	0	0	0
1 PSQASSGQARMFPNAPYLPSCLE 23									

Db 1 PSQASSGQARMFPNAPYLPSCLE 23

Search completed: November 23, 2005, 05:12:34
 Job time : 190 secs

XX PI Gaiger A, McNeill PD, Jaya N;
 XX DR WPI; 2004-021827//02.
 XX PT New polypeptides and polynucleotides useful for generating or enhancing
 PT an immune response to Wilms' tumor, or for treating and/or preventing
 PT malignant diseases, e.g. cancer.
 XX PS Example 1; SEQ ID NO 3; 259PP; English.

The invention relates to an isolated polypeptide comprising an immunogenic portion of a Wilms' tumour antigen (WT1), or their variants that differs in substitution(s), deletion(s), addition(s) and/or insertion(s), where ability of the variant to react with WT1-specific antibodies and/or T-cell lines or clones is not substantially diminished. Also included are a fusion protein comprising at least one WT1 polypeptide, an isolated polynucleotide encoding the fusion protein, a composition comprising a WT1 polypeptide in combination with a pharmaceutical carrier or recipient, a vaccine comprising a WT1 polypeptide in combination with a non-specific immune response enhancer, an expression vector comprising the polynucleotide operably linked to an expression control sequence and a host cell transformed or transfected with the expression vector. The immunogenic portion of the WT1 polypeptide has been modified such that the ability of the immunogenic portion to bind to an MHC (Major Histocompatibility Complex) molecule or to HLA-A2 is increased relative to that of the immunogenic portion. The WT1 polypeptide may comprise a Wilms' tumour antigen having a deletion of a proline rich region at amino acid positions 54-68 of the Wilms' tumour antigen. The fusion partner is selected from Ra12 protein D, LYTA, a HIS tag, a targeting signal capable of directing a polypeptide to the endosomal/lysosomal compartment, twin arginine translocator (TAT), and truncated twin arginine translocator. The polypeptide, polynucleotide or

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Om protein - protein search, using sw model

Run on: November 23, 2005, 05:05:29 ; Search time 38 Seconds

(without alignmentB)
58.236 Million cell updates/sec

Title: US-09-164-223-2
Perfect score: 123
Sequence: 1 PSQASSGQARMFENAPYLPSCLE 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 80.0:
1: pir1:
2: pir2:
3: pir3:
4: pir4:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	123	100.0	448	2 S33926 Wilms' tumor protein Wt1 - rat
2	100.0	448	2 A38080 Wilms' tumor suscep	
3	100.0	449	2 A39692 Wilms' tumor prote	
4	83.7	410	2 JC5046 Wilms' tumor supp	
5	42.3	82	2 S02660 9K protein	
6	49	39.8	2 E82999 probable beta-keto	
7	49	39.8	2 S61189 probable membrane	
8	48	39.0	2 JU0451 hypothetical 21K p	
9	48	39.0	2 159116 MYC protein - huma	
10	48	39.0	2 A29867 hypothetical 20K p	
11	48	39.0	2 179500 MYC protein - huma	
12	48	39.0	2 D83286 hypothetical prote	
13	48	39.0	2 S68450 apoptosis inhibito	
14	48	39.0	2 7782 T167679 proline-rich prote	
15	47	38.2	2 JC4584 insulin-like growth	
16	47	38.2	2 2712 148604 insulin-like growth	
17	47	38.2	2 2722 A53748 insulin-like growt	
18	47	38.2	2 A53748 insulin-like growt	
19	47	38.2	2 B30843 glutenin high mole	
20	47	38.2	2 8152 JN0689 glutenin, high-mol	
21	47	38.2	2 S15720 glutenin high mole	
22	46	37.4	2 5452 T136123 probable lysyl-tRNA	
23	46	37.4	2 6062 T45562 NADH2 dehydrogenas	
24	46	37.4	2 9552 T00247 zinc finger prote	
25	45.5	37.0	2 7042 T24517 hypothetical prote	
26	45.5	36.6	2 3812 A54415 transcription fact	
27	45.5	36.6	2 3822 A48492 polyaccharide exp	
28	45	36.6	2 4842 JC7350 N-acetylglucosamin	
29	45	36.6	2 4882 T33739 hypothetical prote	

ALIGNMENTS

RESULT 1
S33926 Wilms' tumor protein Wt1 - rat
C.Species: Rattus norvegicus (Norway rat)
C.Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 10-May-1996
C.Accession: S33926 R.Sharma, P.M.; Yang, X.; Bowman, M.; Roberts, V.; Sukumar, S.
Cancer Res. 52, 6407-6412, 1992
A.Title: Molecular cloning of rat Wilms' tumor complementary DNA and a study of messeng:
A.Reference number: S33926; MUID:9304615; PMID:1330293
A.Status: preliminary
A.Molecule type: mRNA
A.Residues: 1-448 <SHA>
A.Cross-references: UNIPARC:UPI000017CA1C; EMBL:X69716
A.Gen: Wt1
A.Genetics:
C.Keywords: tumor suppressor

Query Match 100.0%; Score 123; DB 2; Length 448;
Best Local Similarity 100.0%; Pred. No. 4 2e-11; Mismatches 0; Indels 0; Gaps 0;
Matches 23; Conservativeness 0; Description

QY	1 PSQASSGQARMFENAPYLPSCLE 23
Db	116 PSQASSGQARMFENAPYLPSCLE 138

RESULT 2
A38080 Wilms tumor susceptibility protein Wt1 - human
C.Species: Homo sapiens (man)
C.Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 20-Jun-2000
C.Accession: A38080; S08273; A35673; I38504; 152811; 158315; A56411; S26286
R.Gessler, M.; Konig, A.; Bruns, G.A.
Genomics 12, 807-813, 1992
A.Title: The genomic organization and expression of the Wt1 gene.
A.Reference number: A38080; MUID:92241883; PMID:1572653
A.Accession: A38080
A.Molecule type: DNA
A.Residues: 1-449 <GES1>
A.Cross-references: UNIPARC:UPI000017C420; GB:X61631; GB:S99414; NID:937981; PIDN:CAA431
A.Note: it is uncertain whether Met-1 is the initiator or whether translation is initia

A.Note: sequence extracted from NCBI backbone (NCBIN:99414, NCBIN:9422, NCBIN:9979, NCBIN:9978, NCBIN:9977). Note: the sequence in GenBank entry HS1WGEEX1, release 113.0, PIDN:3481.1 differs

R.Gessler, M.; Poustka, A.; Cavenye, W.; Neve, R.L.; Orkin, S.H.; Bruns, G.A.P.
Nature 343, 774-778, 1990
A.Title: Homozygous deletion in Wilms tumours of a zinc-finger gene identified by chrom:
A.Reference number: S08273; MUID:90158822; PMID:2154702
A.Accession: S08273
A.Molecule type: mRNA
A.Residues: SRORPHGALRNPTACPLPHPPSLPPHSPTHPRAGTAQAPGPRRLAILDPLIQLDPASTCVPPBASQH

conserved hypothetical
probable ribonuclease
hypothetical prote
hypothetical prote
translation elonga
hypothetical prote
NADH2 dehydrogenase
NADH2 dehydrogenase
probable outer mem
NPII Protein - yea
melanotransferrin
hypothetical prote
teratocarcinoma-de
teratocarcinoma-de
glyceraldehyde-3-p
DNA-directed DNA p

A;Cross-references: UNIPARC:UPI00016B316; EMBL:X51630; NID:931977; PIDN:CAA35956_1; PID:R; Call, K.M.; Glaser, T.; Ito, C.Y.; Buckler, A.J.; Peltier, J.; Haber, D.A.; Rose, E. Cell 60, 509-530, 1990
 A;Title: Isolation and characterization of a zinc finger polypeptide gene at the human c-A;Reference number: A34673; MUID:90150277; PMID:2154335
 A;Residue type: mRNA
 A;Residues: 85-249, 267-364, 'F', 366-386, 'T', 388-407, 411-449 <CAL>
 A;Cross-references: UNIPARC:UPI000147983; GBB:M30393; NID:934081; PIDN:AAA36810_1; PID:R; Haker, D.A.; Sohn, R.L.; Buckler, A.J.; Peltier, J.; Call, K.M.; Housman, D.E. Proc. Natl. Acad. Sci. U.S.A. 88, 9618-9622, 1991
 A;Title: Alternative splicing and genomic structure of the Wilms tumor gene WT1.
 A;Reference number: A56412; MUID:9052142; PMID:1658787
 A;Contents: annotation; alternative splicing
 R;Phelin, S.A.; Lindberg, C.; Call, K.M.
 Cell Growth Differ. 5, 677-686, 1994
 A;Title: Wilms' tumor gene, WT1, mRNA is down-regulated during induction of erythroid anemia
 A;Reference number: 138504; MUID:94368704; PMID:8086342
 A;Accession: 138504
 A;Status: preliminary; translated from GB/EMBL/DDJB
 A;Molecule type: DNA
 A;Residues: 1-18 <PH>
 A;Cross-references: UNIPARC:UPI00000052B; EMBL:U06486; NID:9473563; PIDN:AA62865_1; PID:R; Pelleter, J.; Bruening, W.; Kastan, C.E.; Mauer, S.M.; Manivel, J.C.; Striegel, J.E. Cell 67, 437-447, 1991
 A;Title: Germline mutations in the Wilms' tumor suppressor gene are associated with abnC;Reference number: 152811; MUID:9295021; PMID:1655284
 A;Accession: 152811
 A;Status: translated from GB/EMBL/DDJB
 A;Molecule type: DNA
 A;Residues: 355-365, 'H', 367-377 <PH>
 A;Cross-references: UNIPARC:UPI000011DDFA; GB:S61513; NID:9237599; PIDN:AA820109_1; PID:R; Hamilton, T.B.; Barilla, K.C.; Romanuk, P.J.
 Nucleic Acids Res. 23, 277-284, 1995
 A;Title: High affinity binding sites for the Wilms' tumour suppressor protein WT1.
 A;Reference number: 158315; MUID:93166649; PMID:7862533
 A;Accession: 158315
 A;Status: translated from GB/EMBL/DDJB
 A;Molecule type: mRNA
 A;Residues: 'WGHHHHHHHHHSSGGHTEGRM', 301-364, 'F', 366-386, 'T', 388-407, 411-449 <HAM>
 A;Cross-references: UNIPARC:UPI000072BDB; GB:S7264; NID:9896246; PIDN:AA83343_1; PID:
 A;Note: this sequence is engineered
 C;Genetics:
 A;Gene: GDB:WT1
 A;Cross-references: GDB:120496; OMIM:194070
 A;Map position: 11p13-11p13
 A;Introns: 148/1; 169/1; 223/2; 249/2; 266/2; 298/3; 349/1; 379/1; 410/1
 A;Note: mRNA transcripts containing both alternatively spliced regions are the most abundant
 C;Keywords: alternative splicing; DNA binding; kidney; tumor suppressor; zinc finger
 F1-407, 411-449/Product: Wilms tumor susceptibility protein WT1, splice form 1 #status predicted
 F1-249, 267-449/Product: Wilms tumor susceptibility protein WT1, splice form 4 #status F
 F1-249, 267-407, 411-449/Product: Wilms tumor susceptibility protein WT1, splice form 3 #status F
 F1-249, 267-407, 411-449/Product: Wilms tumor susceptibility protein WT1, splice form 2 #
 Query Match 100.0%; Score 123; DB 2; Length 449;
 Best Local Similarity 100.0%; Pred. No. 4.3e-11;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 PSQASSQARMFPNAPYLPSCLE 23
 Db 117 PSQASSQARMFPNAPYLPSCLE 139

RESULT 3

A39652 Wilms' tumor protein analog, Wt1 - mouse
 C;Species: Mus musculus (house mouse)
 C;Date: 30-Dec-1991 #sequence_revision 30-Dec-1991 #text_change 16-Feb-1997
 C;Accession: A39652
 R;Buckler, A.J.; Peltier, J.; Haber, D.A.; Glaser, T.; Housman, D.E.
 Mol. Cell. Biol. 11, 1707-1712, 1991
 A;Title: Isolation, characterization, and expression of the murine Wilms' tumor gene (wt1)

A;Reference number: A39692; MUID:91141522; PMID:1671709
 A;Accession: A39692
 A;Status: preliminary
 A;Molecule type: mRNA
 A;Residues: 1-449 <BU>
 A;Cross-references: alternaive splicing; DNA binding; transcription regulation; tumor suppressor
 C;Keywords: alternative splicing; DNA binding; transcription regulation; tumor suppressor
 Query Match 100.0%; Score 123; DB 2; Length 449;
 Best Local Similarity 100.0%; Pred. No. 4.3e-11;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 PSQASSQARMFPNAPYLPSCLE 23
 Db 117 PSQASSQARMFPNAPYLPSCLE 139

RESULT 4
 JC5046 Wilms' tumor suppressor protein - African clawed frog
 N;Alternate names: WT1
 C;Species: Xenopus laevis (African clawed frog)
 C;Date: 31-Jan-1997 #sequence_revision 31-Jan-1997 #text_change 09-Jul-2004
 C;Accession: JC5046
 R;Semb, K.; Saito-Ueno, R.; Takayama, G.; Kondo, M.
 Gene 175, 167-172, 1996
 A;Title: cDNA cloning and its pronephros-specific expression of the Wilms' tumor suppressor gene
 A;Reference number: JC5046; MUID:97074667; PMID:8917094
 A;Contents: testis
 A;Accession: JC5046
 A;Molecule type: mRNA
 A;Residues: 1-410 <SEMr>
 A;Cross-references: UNIPROT:P79958; UNIPARC:UPI000017BFA3; DDBJ:D82051
 C;Comment: This protein is involved in kidney morphogenesis.
 C;Genetics:
 A;Gene: wt1

Query Match 83.7%; Score 103; DB 2; Length 410;
 Best Local Similarity 78.3%; Pred. No. 4.6e-08;
 Matches 18; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
 Qy 1 PSQASSQARMFPNAPYLPSCLE 23
 Db 98 PSQATGQARMFPNAPYLSCLD 120

RESULT 5
 S02660 9K protein (clone PG4) - human
 C;Species: Homo sapiens (man)
 C;Date: 28-Feb-1990 #sequence_revision 28-Feb-1990 #text_change 09-Jul-2004
 C;Accession: S02660
 R;Lammer, R.; Gross, G.; Mayr, U.; Collins, J.
 Eur. J. Biochem. 178, 93-99, 1988
 A;Title: Alternative mechanisms for gene activation induced by poly(rI) * poly(rC) and N
 A;Reference number: S02660; MUID:89078418; PMID:3203696
 A;Molecule type: mRNA
 A;Residues: 1-82 <LM>
 A;Cross-references: UNIPROT:P13994; UNIPARC:UPI000124FA8; EMBL:X13956; NID:932574; PIDN:

Query Match 42.3%; Score 52; DB 2; Length 82;
 Best Local Similarity 47.8%; Pred. No. 0.56;
 Matches 11; Conservative 3; Mismatches 9; Indels 0; Gaps 0;
 Qy 1 PSQASSQARMFPNAPYLPSCLE 23
 Db 23 PLEASSTRARVFPCLPLYACPE 45

RESULT 6

EB82939 probable beta-ketoacyl synthase PA5174 [imported] - Pseudomonas aeruginosa (strain PAO1)

C;Species: *Pseudomonas aeruginosa*
 C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 09-Jul-2004
 C;Accession: E82999
 R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, M.J.; Bradian, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Labbig, K.; Lim, J.; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
 A;Title: Complete genome sequence of *Pseudomonas aeruginosa* PA01, an opportunistic pathogen
 A;Reference number: AB2950; MUID:20437337; PMID:10984043
 A;Accession: E82999
 A;Status: preliminary
 A;Molecule type: DNA
 A;Residues: 1-634 <STOP>
 A;Cross-references: UNIPROT:Q9HUI5; UNIPARC:UPI00000C5F37; GB:AE004930; GB:AE004091; NID:
 A;Experimental source: strain PA01
 C;Genetics:
 A;Gene: PA5174

Query Match 39.8%; Score 49; DB 2; Length 634;
 Best Local Similarity 47.8%; Pred. No. 14; Indels 5; Gaps 1;
 Matches 11; Conservative 3; Mismatches 5;

Qy 5 SSQGARMF---PNAPIYPLSCL2 23
 Db 296 TSQCARVIVGNSEAPIPLECIE 318

RESULT 7

A;Description: The sequence of *S. cerevisiae* cosmid 9740.
 A;Reference number: S61160
 A;Accession: S61189
 A;Molecule type: DNA
 A;Residues: 1-885 <DIN>
 A;Cross-references: UNIPROT:Q06639; UNIPARC:UPI0000053005; EMBL:U28374; NID:9849207; PID:
 C;Genetics:
 A;Gene: SGD:RSC3; MIPS:YDR303C
 A;Cross-references: SGD:S0002711
 A;Map position: 4R
 A;Keywords: transmembrane protein
 F:9-47;Domain: GAL4 zinc binuclear cluster homology <GAL4>
 F:42-438/Domain: transmembrane #status predicted <TM2>
F:699-715/Domain: transmembrane #status predicted <TM2>

Query Match 39.8%; Score 49; DB 2; Length 885;
 Best Local Similarity 50.0%; Pred. No. 20; Indels 9; Gaps 0;
 Matches 10; Conservative 1; Mismatches 0;

Qy 1 PSQASSQGARMFPLNAPYLPS 20
 Db 53 PSSSSSNTRQVANGPYLNS 72

RESULT 8

JU0451 hypothetical 21K protein (c-myc 5' region) - chimpanzee
 C;Species: Pan troglodytes (chimpanzee)
 C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 09-Jul-2004
 C;Accession: JU0451
 R;Argaut, C.; Rigolet, M.; Bladari, M.B.; Galibert, F.
Gene 97, 231-237, 1991
 A;Title: Cloning and nucleotide sequence of the chimpanzee c-myc gene.
 A;Reference number: JU0449; MUID:91153652; PMID:1999286
 A;Accession: JU0451
 A;Status: translation not shown
 A;Molecule type: DNA

RESULT 9

I59116 myc protein - human
 C;Species: Homo sapiens (man)
 C;Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
 C;Accession: I59116
 R;Finver, S.N.; Nishikura, K.; Finger, L.R.; Haluska, F.G.; Finan, J.; Nowell, P.C.; Crick, Proc. Natl. Acad. Sci. U.S.A. 85, 3052-3056, 1988
 A;Title: Sequence analysis of the MYC oncogene involved in the t(8;14)(q24;q11) chromosomal rearrangement
 A;Reference number: I59116; MUID:88203638; PMID:2834731
 A;Accession: I59116
 A;Status: preliminary; translated from GB/EMBL/DDBJ
 A;Residues: 1-188 <RS>
 A;Cross-references: UNIPROT:Q14901; UNIPARC:UPI000006E838; GB:M20605; NID:9188974; PID:

Query Match 39.0%; Score 48; DB 2; Length 188;
 Best Local Similarity 72.7%; Pred. No. 5; Indels 2; Gaps 0;
 Matches 8; Conservative 1; Mismatches 2;

Qy 13 PNAPIYPLSCL2 23
 Db 22 PGPRWPLSCL2 32

RESULT 10

A29867 hypothetical 20K protein (myc 5' region) (Burkitt lymphoma) - human
 C;Species: Homo sapiens (man)
 C;Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 09-Jul-2004
 C;Accession: A29867
 R;Shaw, L.C.; Moore, R.C.A.; Erikson, J.J.; Croce, C.M.
Proc. Natl. Acad. Sci. U.S.A. 84, 2834-2838, 1987
 A;Title: MYC oncogene involved in a t(8;22) chromosome translocation is not altered in Burkitt lymphoma cells
 A;Reference number: A29867; MUID:87204220; PMID:303665
 A;Accession: A29867
 A;Molecule type: DNA
 A;Residues: 1-188 <SHO>
 A;Cross-references: UNIPROT:Q16591; UNIPROT:Q14901; UNIPARC:UPI000179710

Query Match 39.0%; Score 48; DB 2; Length 188;
 Best Local Similarity 72.7%; Pred. No. 5; Indels 2; Gaps 0;
 Matches 8; Conservative 1; Mismatches 2;

Qy 13 PNAPIYPLSCL2 23
 Db 22 PGPRWPLSCL2 32

RESULT 11

I77500 myc protein - human
 C;Species: Homo sapiens (man)
 C;Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
 C;Accession: I77500
 R;Finver, S.N.; Nishikura, K.; Finger, L.R.; Haluska, F.G.; Finan, J.; Nowell, P.C.; Crick, Proc. Natl. Acad. Sci. U.S.A. 85, 3052-3056, 1988
 A;Title: Sequence analysis of the MYC oncogene involved in the t(8;14)(q24;q11) chromosomal rearrangement
 A;Reference number: I59116; MUID:88203638; PMID:2834731
 A;Accession: I77500
 A;Status: preliminary; translated from GB/EMBL/DDBJ

A; Molecule type: DNA
A; Cross-references: UNIPROT:Q16591; UNIPARC:UPI000006D15D; GB:J03253; NID:9188976; PIDN:
Query Match 39.0%; Score 48; DB 2; Length 188;
Best Local Similarity 72.7%; Pred. No. 5.6; Matches 8; Conservative 72; Mismatches 2; Indels 0; Gaps 0;
Oy 13 PNA[P]LPSCLE 23
Db 22 PG[P]WLPSCLE 32
RESULT 12
b33286 hypothetical protein PA2886 [imported] - <i>Pseudomonas aeruginosa</i> (strain PA01)
C; Species: <i>Pseudomonas aeruginosa</i>
C; Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 09-Jul-2004
C; Accession: D83286
R; Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, M.J.; Br
adman, S.; Yuan, Y.; Brody, D.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.; Lim,
Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
A; Title: Complete genome sequence of <i>Pseudomonas aeruginosa</i> PA01, an opportunistic patho
A; Reference number: AB2950; NUID:20437337; PMID:10984043
A; Accession: D83286
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-600 <STO>
A; Cross-references: UNIPROT:Q9HZW1; UNIPARC:UPI00000C5861; GB:AB004714; GB:AE004091; NID:
A; Experimental source: strain PA01
C; Genetic:
A; Gene: PA2886
Query Match 39.0%; Score 48; DB 2; Length 600;
Best Local Similarity 47.4%; Pred. No. 19; Matches 9; Conservative 3; Mismatches 7; Indels 0; Gaps 0;
Oy 4 ASSG[ARMF]PNA[P]LSCLE 22
Db 125 AKSG[REMFSDA]PPPMCV 143
RESULT 13
S68450 apoptosis inhibitor hiap-2 - human
C; Species: Homo sapiens (man)
C; Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 09-Jul-2004
C; Accession: S68450
R; Liston, P.; Roy, N.; Tamai, K.; Lefebvre, C.; Baird, S.; Cherton-Horvat, G.; Farahani, Nature 379, 349-353, 1996
A; Title: Suppression of apoptosis in mammalian cells by IAP and a related family of IAP
A; Reference number: AS1812; NUID:96149249; PMID:8552191
A; Accession: S68450
A; Status: nucleic acid sequence not shown
A; Molecule type: mRNA
A; Residues: 1-618 <LIS>
A; Cross-references: UNIPROT:Q13490; UNIPARC:UPI000004A35C; EMBL:U45879; NID:91184317; PI
C; Function:
A; Description: apoptotic suppressor
C; Keywords: apoptosis; zinc finger
F; 567-611/Domain: RING finger homology <RNG>
Query Match 39.0%; Score 48; DB 2; Length 618;
Best Local Similarity 50.0%; Pred. No. 20; Matches 10; Conservative 2; Mismatches 8; Indels 0; Gaps 0;
Oy 4 ASSG[ARMF]PNA[P]LSCLE 23
Db 236 AMSERRRHPPCPPLNSLE 255

Proline rich protein A189R - Chlorella virus PBCV-1
 C;Species: Chlorella virus PBCV-1
 C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
 C;Accession: T17679
 R;Graves, M.V.; Van Etten, J.L.
 submitted to the EMBL Data Library, May 1999
 A;Reference number: Z18805
 A;Accession: T17679
 A;Status: preliminary; translated from GB/EMBL/DDJB
 A;Molecule type: DNA
 A;Residues: 1-178 <GRA>
 A;Cross-references: UNIPROT:Q84509; UNIPARC:UPI00000EFD2; EMBL:U42580; NID:94028896; PII:
 A;Experimental source: specific host Chlorella strain NCC4A
 C;Genetics:
 A;Note: A189R

RESULT 15
 JC4584 insulin-like growth factor binding protein-5 precursor - pig
 C;Species: Sus scrofa domestica (domestic pig)
 C;Date: 10-Apr-1996 #sequence_revision 24-May-1996 #text_change 09-Jul-2004
 C;Accession: JC4584; G3734
 R;Whitt, M.E.; Dico, R.; Hathaway, M.R.; Mickelson, J.; Dayton, W.R.
 Biochem. Biophys. Res. Commun. 218, 248-253, 1996
 A;Title: Molecular cloning and sequence analysis of the porcine insulin-like growth factor-1 gene.
 A;Reference number: JC4584; MUID:96136309; PMID:8573141
 A;Accession: JC4584
 A;Molecule type: mRNA
 A;Residues: 1-271 <WHI>
 A;Cross-references: UNIPROT:Q28995; UNIPARC:UPI00012D11E; GB:U41340; NID:91173906; PIDN
 A;Experimental source: skeletal muscle
 R;Shimasaki, S.; Gao, L.; Shimomaka, M.; Ling, N.
 Mol. Endocrinol. 5, 938-948, 1991
 A;Title: Isolation and molecular cloning of insulin-like growth factor-binding protein-6
 A;Reference number: A23734; MUID:92049376; PMID:1719383
 A;Accession: G23734
 A;Molecule type: protein
 A;Residues: 20-25, 'X', 27-28, 'X', 30-36, 'X', 38-39 <SHI>
 A;Cross-references: UNIPARC:UPI0000866D5
 C;Comment: This protein has essential roles in the regulation and coordination of insulin-like growth factor binding protein-6. It plays a role during myoblast proliferation and differentiation, and is important in the growth of skeletal muscle.

C;Superfamily: insulin-like growth factor binding protein; thyroglobulin type I repeat domain
 F;1-191/Domain: signal sequence #status predicted <SIG>
 F;20-271/Product: insulin-like growth factor binding protein-5 #status experimental <MAT>
 F;191-262/Domain: thyroglobulin type I repeat homology <THI>
 Query Match 38.2%; Score 47; DB 2; Length 271;
 Best Local Similarity 47.4%; Pred. No. 12; Mismatches 9;
 Matches 9; Conservative 1; Indels 0; Gaps 0;
 Db 200 QASSQARMEPNAPVLPSC 21
 Db 200 QELKASPRMVPRAVYLPCN 218

Search completed: November 23, 2005, 05:17:15
 Job time : 40 secs

	Matches	23; Conservative	0;	Mismatches	0;	Indels	0;	Gaps	0;
QY	1	P\$QASSGQARMFPNAPYLPSCLE	23						
Db	117	P\$QASSGQARMFPNAPYLPSCLE	139						
RESULT 2									
Q4VXV5_HUMAN									
ID Q4VXV5_HUMAN PRELIMINARY;				PRT;	429 AA.				
AC Q4VXV5;									
DT 13-SEP-2005 (TREMBLrel. 31, Created)									
DT 13-SEP-2005 (TREMBLrel. 31, Last sequence update)									
DE Wilms tumor 1.									
GN Name=Wt1; ORFNames=AL049692.1-001;									
OS Homo sapiens (Human);									
RA Frankland J.;									
RL Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.									
DR EMBL; AL049692; CAI95758.1; -; Genomic_DNA.									
DR Inter-Pro; IPR00976; Znf_C2H2.									
DR Pfam; PF00165; Wt1; 1.									
DR InterPro; IPR007087; Znf_C2H2.									
DR PRINTS; PR00049; WILMSTUMOUR.									
DR SMART; SM00355; Znf_C2H2; 4.									
RP NUCLEOTIDE SEQUENCE.									
RA Frankland J.;									
RL Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.									
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DR Inter-Pro; IPR00976; Wilms tumour.									
DR Homo.									
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RA Frankland J.;									
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DR Homo.									
DR NCBI_TAXID=9605;									
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RA Frankland J.;									
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DR Inter-Pro; IPR00976; Wilms tumour.									
DR Homo.									
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RA Frankland J.;									
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DR Inter-Pro; IPR00976; Wilms tumour.									
DR Homo.									
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DR EMBL; AL049692; CAI95758.1; -; Genomic_DNA.									
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RL Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.									
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DR Inter-Pro; IPR00976; Wilms tumour.									
DR Homo.									
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RN [1]									
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DR Inter-Pro; IPR00976; Wilms tumour.									
DR Homo.									
DR NCBI_TAXID=9605;									
RN [1]									
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RA Frankland J.;									
RL Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.									
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DR Inter-Pro; IPR00976; Wilms tumour.									
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RA Frankland J.;									
RL Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.									
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DR Inter-Pro; IPR00976; Wilms tumour.									
DR Homo.									
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RA Frankland J.;									
RL Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.									
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DR Inter-Pro; IPR00976; Wilms tumour.									
DR Homo.									
DR NCBI_TAXID=9605;									
RN [1]									
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RA Frankland J.;									
RL Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.									
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DR Inter-Pro; IPR00976; Wilms tumour.									
DR Homo.									
DR NCBI_TAXID=9605;									

- DR PRODOM; PDD00003; znf_C2H2; 2.
 DR SMART; SMM0355; Znf_C2H2; 4.
 DR PROSITE; PS00028; ZINC_FINGER_C2H2_1; 4.
 DR PROSITE; PS05157; ZINC_FINGER_C2H2_2; 4.
 KW Alternative splicing; Anti-oncogene; Cell cycle; DNA-binding;
 KW Metal-binding; Nuclear protein; Zinc-finger transcription;
 KW Transcription regulation; Zinc-finger.
 PT ZN_FING 322 346 CH2-type 1.
 PT ZN_FING 352 376 C2H2-type 2.
 PT ZN_FING 382 404 C2H2-type 3.
 PT ZN_FING 413 437 C2H2-type 4.
 PT COMBPIAS 27 82 MleBing (in isoform 2 and isoform 3).
 PT VARSPLIC 249 265 MleBing (in isoform 2 and isoform 4).
 PT VARSPLIC 407 409 /Frida&JP 006873.
 SQ SEQUENCE 448 AA; 49193 MM; 329AC9A-C1FF73F76 CRC64;
 Query Match 100.0%; Score 123; DB 1; Length 448;
 Best Local Similarity 100.0%; Pred. No. 6 6e-10;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Ov 1 PSQASSGQARMFPNAPYLPSCLE 23
 Db 116 PSQASSGQARMFPNAPYLPSCLE 138
- RESULT 5
- WT1_HUMAN STANDARD; PRT; 449 AA.
 ID WT1_HUMAN
 AC Q16581; Q16256; Q8IY25;
 DT 01-FEB-1991 (Rel. 17, Created)
 DT 01-AUG-1991 (Rel. 19, Last sequence update)
 DT 13-SEP-2005 (Rel. 48, Last annotation update)
 DE Wilms' tumor protein (WT133).
 GN Name=WT1;
 OS Homo sapiens (Human);
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominoidea;
 OC Homo;
 OX NCBI_TAXID=9606;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RC TISSUE=Fetal kidney;
 RX MEDLINE-90150822; PubMed=2154702; DOI=10.1038/343774a0;
 RA Gebsler M., Pousta A., Cavener W., Neve R. L., Orkin S. H.,
 RA Bruns G. A. P.;
 RT "Homozygous deletion in Wilms tumours of a zinc-finger gene identified
 by chromosome jumping.";
 RL Nature 343:774-778(1990).
 RN [2]
 RP NUCLEOTIDE SEQUENCE, AND ALTERNATIVE SPlicing.
 RC TISSUE=Placenta;
 RX MEDLINE-92052142; PubMed=1658787;
 RA Haber D. A., Sohn R. L., Buckler A. J., Pelletier J., Call K. M.,
 RA Housman D. E.;
 RT "Alternative splicing and genomic structure of the Wilms tumor gene
 WT1.";
 RT Proc. Natl. Acad. Sci. U.S.A. 88:9618-9622(1991).
 RN [3]
 RP NUCLEOTIDE SEQUENCE [ISOFORM 4].
 RX MEDLINE-92241883; PubMed=1572653;
 RA Gebsler M., Konig A., Bruns G. A. P.;
 RT "The genomic organization and expression of the WT1 gene.";
 RL Genomics 12:807-813(1992).
 RN [4]
 RP NUCLEOTIDE SEQUENCE [GENOMIC DNA].
 RA Rieder M. J., Livingston R. J., Daniels M. R., Chung M.-W.,
 RA Miyamoto K. E., Nguyen D. A., Poel C. L., Robertson P. D.,
 RA Schackwitz W. S., Sherwood J. K., Wittek L. A., Nickerson D. A.;
 RT "NIHHS-SIPS, environmental genome project, NIEHS ES1478, Department
 of Genome Sciences, Seattle, WA (URL: http://egg.gs.washington.edu)." ;
 RT Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.
 RL
- [5] NUCLEOTIDE SEQUENCE OF 85-449.
 RN RP Nucleotide sequence of 85-449.
 RX MEDLINE=90150277; PubMed=2154335; DOI=10.1016/0092-8674(90)90601-A;
 RA Call K. M., Glaser T., Ito Y., Buckler A. J., Pelletier J.,
 RA Haber D. A., Rose E. A., Kral A., Yeger H., Lewis W. H., Jones C.,
 RA Housman D. E.;
 RA "Isolation and characterization of a zinc finger polypeptide gene at
 the human chromosome 11 Wilms' tumor locus.";
 RL Cell 60:509-520(1990).
 [6] NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].
 RN RP Human chromosome 11 international sequencing consortium;
 RG Human chromosome 11 international sequencing consortium;
 RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
 RN [7] NUCLEOTIDE SEQUENCE [LARGE SCALE mRNA] OF 148-449 (ISOFORM 4).
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R. L., Feingold E. A., Grobe L. H., Derge J. G.,
 RA Klausner R. D., Collins F. S., Wagner L., Shemesh C. M., Schuler G. D.,
 RA Altschul S. F., Zeeberg B., Buetow K. H., Schaefer C. F., Bhat N. K.,
 RA Hopkins R. F., Jordan H., Moore T., Max S. I., Wang J., Hsieh F.,
 RA Diatchenko L., Marsuska K., Farmer A. A., Rubin G. M., Hong L.,
 RA Stapleton M., Sharees M. B., Bonaldo M. F., Casavant T. L., Schatz T. E.,
 RA Brownstein M. J., Usdin T. B., Tashiroki S., Canninci P., Prange S.,
 RA Raha S. S., Loquaiello N. A., Peters G. J., Abramson R. D., Mullahy S. J.,
 RA Bosak S. A., McEvany P. J., McKernan K. J., Malek J. A., Gunaratne P. H.,
 RA Richards S., Worley K. C., Hale S., Garcia A. M., Gay L. J., Hulyk S. W.,
 RA Villalon D. K., Muzyk D. M., Sodergren E. J., Lu X., Gibbs R. A.,
 RA Fahy J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A., Young A. C., Shevchenko Y., Bouffard G. G.,
 RA Blakesley R. W., Touchman J. W., Green E. D., Dickson M. C.,
 RA Rodriguez A. C., Grimwood J., Schmutz J., Myers R. M.,
 RA Butterfield Y. S. N., Krzywinski M. I., Skalski U., Smailus D. E.,
 RA Schnerch A., Schon J. E., Jones S. J. M., Marra M. A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences";
 RT Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
 RN [8] NUCLEOTIDE SEQUENCE OF 301-449.
 RC TISSUE=Fetal kidney;
 RX MEDLINE=9516649; PubMed=7862533;
 RA Hamilton T. B., Barilla K. C., Romanik P. J.,
 RA RT "High affinity binding sites for the Wilms' tumour suppressor protein
 RT WT1.";
 RL Nucleic Acids Res. 23:277-284(1995).
 RN [9] IDENTIFICATION OF START CODON, AND ALTERNATIVE SPLICE SITES.
 RX MEDLINE-9114152; PubMed=1571709;
 RA Buckler A. J., Pelletier J., Haber D. A., Glaser T., Housman D. E.;
 RT "Isolation, characterization, and expression of the murine Wilms'
 RT tumor gene (WT1) during kidney development.";
 RL Mol. Cell. Biol. 11:1707-1712(1991).
 RN [10] INTERACTION WITH WTAP.
 RX MEDLINE=2043888; PubMed=11001926;
 RA Little N. A., Bastie N. D., Davies R. C.;
 RT "Identification of WTAP, a novel Wilms' tumour 1-associated
 RT protein.";
 RL Hum. Mol. Genet. 9:2231-2239(2000).
 RN [11] INTERACTION WITH ZNF224.
 RP REVIEW.
 RX PubMed=12239212; DOI=10.1074/jbc.M205667200;
 RA Lee T. H., Lwu S., Kim J., Pelletier J.;
 RT "Inhibition of Wilms tumor 1 transactivation by bone marrow zinc
 RT finger 2, a novel transcriptional repressor.";
 RL J. Biol. Chem. 277:44826-44837(2002).
 RN [12] NUCLEOTIDE SEQUENCE [GENOMIC DNA].
 RA Rieder M. J., Livingston R. J., Daniels M. R., Chung M.-W.,
 RA Call K. M., Glaser T., Ito Y., Buckler A. J., Pelletier J.,
 RA Haber D. A., Rose E. A., Kral A., Yeger H., Lewis W. H., Jones C.,
 RA "WT1: a novel tumor suppressor gene inactivated in Wilms' tumor.";
 RL New Biol. 4:97-105(1992).
 RN [13]

- RP REVIEW.
 RX MEDLINE=03345769; PubMed=8393820;
 RA Rauscher F.J. III.
 RT "The Wt1 Wilms tumor gene product: a developmentally regulated transcription factor in the kidney that functions as a tumor suppressor.";
 RT FASEB J. 7:896-903 (1993).
 RN [14]
 RP VARIANT Wt1 CYG-366.
 RX MEDLINE=92279213; PubMed=1317572;
 RA Little M.H., Prosser J., Condle A., Smith P.J., van Heyningen V.,
 RA Hastic N.D.; point mutations within the Wt1 gene in Wilms tumor patients";
 RT Proc. Natl. Acad. Sci. U.S.A. 89:4791-4795(1992).
 RN [15]
 RP VARIANT DDS.
 RX MEDLINE=9205721; PubMed=1655284; DOI=10.1016/0092-8674(91)90194-4;
 RA Peletier J., Bruening W., Kahtan C.E., Mauer S.M., Manivel J.C.,
 RA Striegl J.E., Houghton D.C., Junien C., Habib R., Fouquer L.,
 RA Fine R.N., Silverman B.L., Haber D.A., Housman D.E.;
 RT "Germline mutations in the Wilms' tumor suppressor gene are associated with abnormal urogenital development in Denys-Drash syndrome.";
 RL Cell 67:437-447(1991).
 RN [16]
 RP VARIANT DDS.
 RX MEDLINE=92265053; PubMed=1338906;
 RA Baird P.N., Santos A., Groves N., Jadreac L., Cowell J.K., Denys-Drash "Constitutional mutations in the Wt1 gene in patients with Denys-Drash syndrome.";
 RT Hum. Mol. Genet. 1:301-305(1992).
 RL [17]
 RP NUCLEOTIDE SEQUENCE OF 385-405, AND VARIANT DDS TRP-394.
 RX MEDLINE=92250986; PubMed=130208;
 RA Bruening W., Bardeesy N., Silverman B.L., Cohn R.A., Machin G.A.,
 RA Aronson A.J., Housman D., Peletier J.,
 RT "Germline intronic and exonic mutations in the Wilms' tumour gene (Wt1) affecting urogenital development.";
 RL Nat. Genet. 1:144-148(1992).
 RN [18]
 RP VARIANT DDS.
 RX MEDLINE=92271983; PubMed=8388765;
 RA Little M.H., Williamson K.A., Mannens M., Kelsey A., Gosden C.,
 RA Hastic N.O., van Heyningen V.,
 RT "Evidence that Wt1 mutations in Denys-Drash syndrome patients may act in a dominant negative fashion.";
 RT Hum. Mol. Genet. 2:259-264(1993).
 RN [19]
 RP VARIANT DDS TRP-394 AND PRO-398.
 RX MEDLINE=94125627; PubMed=8295405;
 RA Tsuda M., Sakiyama T., Kitagawa S., Watanabe S., Watanabe T.,
 RA Takahashi S., Kawaguchi H., Ito K.;
 RT "Molecular analysis of two Japanese cases of Denys-Drash syndrome.";
 RL J. Inherit. Metab. Dis. 16:876-880(1993).
 RN [20]
 RP VARIANT MESOTHELIOMA GLY-273.
 RX MEDLINE=94004972; PubMed=8401992;
 RA Park S., Schalling M., Bernard A., Maheswaran S., Shipley G.C.,
 RA Roberts D., Fletcher J., Shiman R., Rheinwald J., Demetri G.,
 RA Griffin J., Minden M., Housman D.E., Haber D.A.;
 RT "The Wilms' tumour gene Wt1 is expressed in murine mesoderm-derived tissues and mutated in a human mesothelioma.";
 RT Nat. Genet. 4:415-420(1993).
 RP VARIANT DDS ARG-377.
 RX MEDLINE=94156335; PubMed=8112732; DOI=10.1007/BF00210593;
 RA Nordenkjold A., Friedman E., Anret M.;
 RT "Wt1 mutations in patients with Denys-Drash syndrome: a novel mutation in exon 8 and paternal allele origin.";
 RL Hum. Genet. 93:115-120(1994).
 RN [21]
 RP VARIANT DDS TYR-373.
 RX MEDLINE=97114281; PubMed=8956030;
- RA Ghahremani M., Chan C.B., Bistrizter T., Aladjem M.M., Tieder M., Peletier J.;
 RA "A novel mutation H373Y in the Wilms' tumor suppressor gene, Wt1, associated with Denys-Drash syndrome.";
 RT Hum. Hered. 46:336-338(1996).
 RN [23]
 RP VARIANT Wt1 SBR-181 AND ALA-253.
 RX MEDLINE=9726681; PubMed=9108089; DOI=10.1073/pnas.94.8.3972;
 RA Schumacher V., Schneider S., Figege A., Wildhardt G., Harms D., Schmidt D., Weirich A., Ludwig R., Royer-Pokora B.;
 RA Query Match 100.0%; Score 123; DB 1; Length 449;
 Best Local Similarity 100.0%; Pred. No. 6.6e-10;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
- OQ 1 PSQASSQARMRPAVPYLPSCLE 23
 Db 117 PSQASSQARMRPAVPYLPSCLE 139
- RESULT 6
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 ID_WT1_MOUSE
 AC P23561;
 DT 01-AUG-1991 (Rel. 19, Created)
 DT 01-AUG-1991 (Rel. 19, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DB Wilms' tumor protein homolog
 GN Name=Wt1; Synonyms=Wt-1;
 OS Mus musculus (Mouse)
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
 OC Muridae; Muridae; Murinae; Mus.
 RN [1]
 RP NUCLEOTIDE SEQUENCE (ISOFORMS 1; 2; 3 AND 4).
 RX MEDLINE=91141522; PubMed=1671709;
 RA Buckler A.J., Peletier J., Haber D.A., Glaser T., Housman D.E.,
 RT "Isolation, characterization, and expression of the murine Wilms' tumor gene (wt1) during kidney development.";
 RL Mol. Cell. Biol. 11:1707-1712(1991).
 CC -!- FUNCTION: Potential role in transcriptional regulation. Recognizes and binds to the DNA sequence 5'-GGCCCCGC-3' zinc-finger region.
 CC -!- SUBUNIT: Interacts with WTAP (By similarity).
 CC -!- SUBCELLULAR LOCATION: Nuclear.
 CC -!- ALTERNATIVE PRODUCTS: Event=Alternative splicing; Named isoforms=4;
 CC Name=1; IsoId=p22561-1; Sequence=Displayed;
 CC Name=2; IsoId=p22561-2; Sequence=vsp_006868, vsp_006869;
 CC Name=3; IsoId=p22561-3; Sequence=vsp_006868;
 CC Name=4; IsoId=p22561-4; Sequence=vsp_006869;
 CC --!- TISSUE SPECIFICITY: Kidney.
 CC --!- DEVELOPMENTAL STAGE: Expressed during kidney development.
 CC --!- SIMILARITY: Belongs to the EGR C2H2-type zinc-finger protein family.
 CC --!- SIMILARITY: Contains 4 C2H2-type zinc fingers.
 CC This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.
 CC -----
 CC -----
 DR EMBL; M5512; AAA40573.1; mRNA.
 DR HSSP; P03046; 1F21.
 DR TRANSFAC; T0251.
 DR Ensemble; ENSMUSG00000016458; Mus musculus.
 DR MGII; MGII; 98968; Wt1.

DR GO: GO:0005737; C:cytoplasm; IDA.
 DR GO: GO:0005634; C:nucleus; IDA.
 DR GO; GO:0005515; F:protein binding; IPI.
 DR GO; GO:0003055; P:epithelial cell differentiation; IMP.
 DR GO; GO:001147; P:eye morphogenesis (sense Mammalia); IMP.
 DR GO; GO:0007281; P:germ cell development; IMP.
 DR GO; GO:0009888; P:histogenesis; IMP.
 DR GO; GO:0008584; P:male gonad development; IMP.
 DR GO; GO:0001823; P:mesonephros development; IMP.
 DR GO; GO:0001556; P:metanephros development; IMP.
 DR GO; GO:0006357; P:regulation of transcription from RNA polymerase . . . ; IDA.
 DR InterPro; IPR000916; Wilms tumour.
 DR InterPro; IPR007087; Znf_C2H2.
 DR Pfam; PF02165; WTL_1.
 DR PRINTS; PRO0096; zf_C2H2.
 DR PRODom; PD00003; Znf_C2H2.
 DR SMART; SM00355; Znf_C2H2; 4.
 DR PROSITE; PS00028; Zinc_FINGER_C2H2_1; 4.
 DR PROSITE; PS050157; Zinc_FINGER_C2H2_2; 4.
 KW Alternative splicing; Anti-oncogene; Cell cycle; DNA-binding;
 Transcription regulation; Zinc; Zinc-finger.
 FT ZN_FING 323 347 C2H2-type 1.
 FT ZN_FING 353 377 C2H2-type 2.
 FT ZN_FING 383 405 C2H2-type 3.
 FT ZN_FING 414 438 C2H2-type 4.
 FT COMBIAS 28 83 Pro-rich.
 FT VARSPLIC 250 266 Missing (in isoform 2 and isoform 3).
 /FTid=VSP_006878.
 Best Local Similarity 100.0%; Score 123, DB 1; Length 449;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 PSQASSGQARMFPNAPYLPSCLE 23
 Db 117 PSQASSGQARMFPNAPYLPSCLE 139

RESULT 7

WTL_PIG	STANDARD	PRT	449 AA.
ID AC_062751; 15-DEC-1998 (Rel. 37, Created)			
DT 15-DEC-1998 (Rel. 37, last sequence update)			
DT 10-MAY-2005 (Rel. 47, Last annotation update)			
DE Wilms' tumor protein homolog.			
GN Name=WTL;			
OS Sub arcota (Pgi).			
OC Bivalvia; Metazoa; Chordata; Craniata; Euteleostomi;			
OC Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae;			
OC SubTaxID=9823;			
RN [1]			
RP NUCLEOTIDE SEQUENCE (ISOFORMS 1; 2; 3 AND 4).			
RC STRAIN=LD; TISSUE=Kidney; PubMed=602131; DOI=10.1016/S0378-1119(98)00112-7;			
RA Tsurutani N., Oda H., Nakatsuru Y., Imai Y., Zhang S., Ueno Y., Ishikawa T.;			
RT "cDNA cloning and developmental expression of the porcine homologue of WTL"; Gene 211:215-220(1998).			
RL Gene 211:215-220(1998);			
CC -- FUNCTION: Potential role in transcriptional regulation. Recognizes and binds to the DNA sequence 5'-CCCCCCGGC-3'. -- SUBUNIT: Interacts with ZNF224 via the zinc-finger region.			
CC - - SUBCELLULAR LOCATION: Nuclear.			
CC - - ALTERNATIVE PRODUCTS: Alternative splicing; Named isoforms=4;			
CC Event=Alternative splicing; Named isoforms=4;			

Comment=Experimental confirmation may be lacking for some isoforms;

Name=1; IsoId=062651-1; Sequence=Displayed;

Name=2; IsoId=062651-2; Sequence=VSP_006870; VSP_006871; Name=3; IsoId=062651-4; Sequence=VSP_006871;

-!- DEVELOPMENTAL STAGE: Expressed during kidney development.

-!- SIMILARITY: Belongs to the EGR C2H2-type zinc-finger protein family.

-!- SIMILARITY: Contains 4 C2H2-type zinc fingers.

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CC DR EMLB; AB010969; BRA28147.1; mRNA.

CC DR HSPB; P08046; IFE2I.

CC DR InterPro; IPR000975; Wilms tumour.

CC DR InterPro; IPR007087; Znf_C2H2.

CC DR Pfam; PF02165; WTL_1.

CC DR Pfam; PF0096; zf_C2H2; 4.

CC DR PRINTS; PRO00949; WILMSTUMOUR.

CC DR PRODom; PD000003; Znf_C2H2; 2.

CC DR SMART; SM00355; Znf_C2H2; 4.

CC DR PROSITE; PS00028; Zinc_FINGER_C2H2_1.

CC DR PROSITE; PS050157; Zinc_FINGER_C2H2_2.

CC DR Alternative splicing; Anti-oncogene; Cell cycle; DNA-binding; Metal-binding; Nuclear protein; Repeat; Transcription;

CC KW Transcription regulation; Zinc; Zinc-finger.

FT ZN_FING 323 347 C2H2-type 1.
 FT ZN_FING 353 377 C2H2-type 2.
 FT ZN_FING 383 405 C2H2-type 3.
 FT ZN_FING 414 438 C2H2-type 4.
 FT COMBIAS 28 83 Pro-rich.
 FT VARSPLIC 249 266 Missing (in isoform 2 and isoform 3).
 /FTid=VSP_006878.
 Best Local Similarity 100.0%; Pred. No. 6.6e-10; Mismatches 0; Indels 0; Gaps 0;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PSQASSGQARMFPNAPYLPSCLE 23
 Db 117 PSQASSGQARMFPNAPYLPSCLE 139

RESULT 8

P79958_XENLA	P79958_XENLA PRELIMINARY	PRT	407 AA.
ID P79958; 01-MAY-1997 (TREMBREL_03, Created)			
AC P79958; 01-MAY-1997 (TREMBREL_03, Last sequence update)			
DT 01-OCT-2003 (TREMBREL_25, Last annotation update)			
DB WTL Protein.			
GN Name=WTL;			
OS Xenopus laevis (African clawed frog).			
OC Bivalvia; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus; Xenopus.			
OC XNCB_TaxID=8355;			
RN [1]			
RP NUCLEOTIDE SEQUENCE.			
RX TISSUE=Testis;			
CC MEDLINE=97074667; PubMed=8917094; DOI=10.1016/0378-1119(96)00143-6;			

OM protein - protein search, using sw model
Run on: November 23, 2005, 05:16:36 ; Search time 168 Seconds
Copyright (c) 1993 - 2005 Compugen Ltd.

RESULT 1
US-09-938-864-2

Sequence 2, Application US/09938864
Publication No. US20030072767A1

GENERAL INFORMATION:

APPLICANT: Gaiger, Alexander
APPLICANT: McNeill, Patricia D.
APPLICANT: Smithgall, Molly
APPLICANT: Moulton, Gus
APPLICANT: Vedvick, Thomas S.
APPLICANT: Sleath, Paul R.
APPLICANT: Mossman, Sally
APPLICANT: Evans, Lawrence
APPLICANT: Spies, A. Gregory
APPLICANT: Boydston, Jeremy
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WT1
TITLE OF INVENTION: SPECIFIC IMMUNOTHERAPY
FILE REFERENCE: 210121.465CS
CURRENT APPLICATION NUMBER: US/09/938,864
CURRENT FILING DATE: 2001-08-24
NUMBER OF SEQ ID NOS: 413
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 23
TYPE: PRT
ORGANISM: Homo sapien

RESULT 2
US-09-938-864-3

Sequence 3, Application US/09938864
Publication No. US20030072767A1

GENERAL INFORMATION:

APPLICANT: Gaiger, Alexander
APPLICANT: McNeill, Patricia D.
APPLICANT: Smithgall, Molly
APPLICANT: Moulton, Gus
APPLICANT: Vedvick, Thomas S.
APPLICANT: Sleath, Paul R.
APPLICANT: Mossman, Sally
APPLICANT: Evans, Lawrence

SEQUENCE ALIGNMENTS

Query Match	Score	Length	DB	Score	Length	DB	
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Matches	23;	Conservative	0;	Mismatches	0;	Indels	0;
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Db							

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; APPLICANT: Spies, A. Gregory
; APPLICANT: Boydston, Jeremy
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTI
; TITLE OF INVENTION: SPECIFIC IMMUNOTHERAPY
; FILE REFERENCE: 210121_465C5
; CURRENT APPLICATION NUMBER: US/09/938,864
; CURRENT FILING DATE: 2001-08-24
; NUMBER OF SEQ ID NOS: 413
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Mus musculus
; US-09-938-864-3

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Best Local Similarity 100.0%; Pred. No. 5e-11; 0; Mismatches 0; Indels 0; Gaps 0;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 PSQASSGQARMFPNAPYLPSCLE 23
Db 1 PSQASSGQARMFPNAPYLPSCLE 23

RESULT 3
US-09-791-477-2
; Sequence 2, Application US/09791477
; Publication No. US20030082194A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: Cheever, Martin A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSIS
; TITLE OF INVENTION: AND THERAPY OF MALIGNANT MESOTHELIOMA
; FILE REFERENCE: 2077-000200
; CURRENT APPLICATION NUMBER: US/09/791,477
; CURRENT FILING DATE: 2001-02-22
; PRIOR APPLICATION NUMBER: 60/184,070
; PRIOR FILING DATE: 2000-02-22
; NUMBER OF SEQ ID NOS: 326
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-791-477-2

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Best Local Similarity 100.0%; Pred. No. 5e-11; 0; Mismatches 0; Indels 0; Gaps 0;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 PSQASSGQARMFPNAPYLPSCLE 23
Db 1 PSQASSGQARMFPNAPYLPSCLE 23

RESULT 4
US-09-791-477-3
; Sequence 3, Application US/09791477
; Publication No. US20030082194A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: Cheever, Martin A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSIS
; TITLE OF INVENTION: AND THERAPY OF MALIGNANT MESOTHELIOMA
; FILE REFERENCE: 2077-000200
; CURRENT APPLICATION NUMBER: US/09/791,477
; CURRENT FILING DATE: 2001-02-22
; PRIOR APPLICATION NUMBER: 60/184,070
; PRIOR FILING DATE: 2000-02-22
; NUMBER OF SEQ ID NOS: 326
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Mus musculus
; US-09-791-477-3

Query Match 100.0%; Score 123; DB 3; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; 0; Mismatches 0; Indels 0; Gaps 0;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 PSQASSGQARMFPNAPYLPSCLE 23
Db 1 PSQASSGQARMFPNAPYLPSCLE 23

RESULT 5
US-09-785-019-2
; Sequence 2, Application US/09785019
; Publication No. US20030082196A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: Cheever, Martin A.
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Smitgall, Molly
; APPLICANT: Moulton, Gus
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Sleath, Paul
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTI
; TITLE OF INVENTION: SPECIFIC IMMUNOTHERAPY
; FILE REFERENCE: 210121_465C4
; CURRENT APPLICATION NUMBER: US/09/785,019
; CURRENT FILING DATE: 2001-02-15
; NUMBER OF SEQ ID NOS: 376
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Homo sapien
; US-09-785-019-2

Query Match 100.0%; Score 123; DB 3; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; 0; Mismatches 0; Indels 0; Gaps 0;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 PSQASSGQARMFPNAPYLPSCLE 23
Db 1 PSQASSGQARMFPNAPYLPSCLE 23

RESULT 6
US-09-785-019-3
; Sequence 3, Application US/09785019
; Publication No. US20030082196A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: Cheever, Martin A.
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Smitgall, Molly
; APPLICANT: Moulton, Gus
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Sleath, Paul
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTI
; TITLE OF INVENTION: SPECIFIC IMMUNOTHERAPY
; FILE REFERENCE: 210121_465C4
; CURRENT APPLICATION NUMBER: US/09/785,019
; CURRENT FILING DATE: 2001-02-15
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; SOFTWARE: FastSEQ for Windows Version 3.0
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; LENGTH: 23
; TYPE: PRT
; ORGANISM: Mus musculus
; US-09-785-019-3

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Best Local Similarity 100.0%; Pred. No. 5e-11; 0; Mismatches 23; Conservative 0; Indels 0; Gaps 0;

RESULT 7
US-10-125-635A-2
; Sequence 2, Application US/10125635A
; Publication No. US20030039635A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: Smithhall, Molly D.
; APPLICANT: Carter, Darrick
; APPLICANT: Cheever, Martin A.
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Sutherland, R. Alec
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTI
; TITLE OF INVENTION: SPECIFIC IMMUNOTHERAPY
; FILE REFERENCE: 210121.465C7
; CURRENT APPLICATION NUMBER: US/10/125, 635A
; CURRENT FILING DATE: 2002-07-19
; NUMBER OF SEQ ID NOS: 461
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Homo sapien
; US-10-125-635A-2

Query Match 100.0%; Score 123; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; 0; Mismatches 23; Conservative 0; Indels 0; Gaps 0;

Db 1 PSQASSGQARMFPNAPYLPSCLE 23

RESULT 8
US-10-125-635A-3
; Sequence 3, Application US/10125635A
; Publication No. US20030039635A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: Smithhall, Molly D.
; APPLICANT: Carter, Darrick
; APPLICANT: Cheever, Martin A.
; APPLICANT: McNeill, Patricia D.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTI
; TITLE OF INVENTION: SPECIFIC IMMUNOTHERAPY
; FILE REFERENCE: 210121.465C7
; CURRENT APPLICATION NUMBER: US/10/125, 635A
; CURRENT FILING DATE: 2002-07-19
; NUMBER OF SEQ ID NOS: 461
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Mus musculus
; US-10-125-635A-3

Query Match 100.0%; Score 123; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; 0; Mismatches 23; Conservative 0; Indels 0; Gaps 0;

Db 1 PSQASSGQARMFPNAPYLPSCLE 23

RESULT 9
US-10-002-603-2
; Sequence 2, Application US/10002603
; Publication No. US2003009597A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Smithhall, Molly D.
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Sleath, Paul R.
; APPLICANT: Mossman, Sally
; APPLICANT: Evans, Lawrence
; APPLICANT: Spies, A. Gregory
; APPLICANT: Boydston, Jeremy
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTI
; TITLE OF INVENTION: SPECIFIC IMMUNOTHERAPY
; FILE REFERENCE: 210121.465C6
; CURRENT APPLICATION NUMBER: US/10/002, 603
; CURRENT FILING DATE: 2001-10-30
; NUMBER OF SEQ ID NOS: 413
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Mus musculus
; US-10-002-603-2

Query Match 100.0%; Score 123; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; 0; Mismatches 23; Conservative 0; Indels 0; Gaps 0;

Db 1 PSQASSGQARMFPNAPYLPSCLE 23

RESULT 11
US-10-195-835-2
; Sequence 2, Application US/10195835
; Publication No. US20030198622A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: Smitgall, Molly D.
; APPLICANT: Carter, Darrick
; APPLICANT: Cheever, Martin A.
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Sutherland, R. Alec
; APPLICANT: Mosman, Sally P.
; APPLICANT: Evans, Lawrence S.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTL
; TITLE OF INVENTION: SPECIFIC IMMUNOTHERAPY
; FILE REFERENCE: 210121_465C0
; CURRENT APPLICATION NUMBER: US/10/195,835
; CURRENT FILING DATE: 2002-07-12
; NUMBER OF SEQ ID NOS: 461
; SOFTWARE: PastSEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Homo sapien
; US-10-195-835-2

Query Match 100.0%; Score 123; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; Indels 0; Gaps 0;
Matches 23; Conservative 0; Mismatches 0;

Qy 1 PSOASSGQARMFMPNAPYLPSCLE 23
Db 1 PSOASSGQARMFMPNAPYLPSCLE 23

RESULT 12
US-10-195-835-3
; Sequence 3, Application US/10195835
; Publication No. US20030198622A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: Smitgall, Molly D.
; APPLICANT: Carter, Darrick
; APPLICANT: Cheever, Martin A.
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Sutherland, R. Alec
; APPLICANT: Evans, Lawrence S.
; APPLICANT: Swanson, Ryan M.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTL
; FILE REFERENCE: 210121_465C0
; CURRENT APPLICATION NUMBER: US/10/195,835
; CURRENT FILING DATE: 2002-07-12
; NUMBER OF SEQ ID NOS: 461
; SOFTWARE: PastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Mus musculus
; US-10-195-835-3

Query Match 100.0%; Score 123; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; Indels 0; Gaps 0;
Matches 23; Conservative 0; Mismatches 0;

Qy 1 PSOASSGQARMFMPNAPYLPSCLE 23
Db 1 PSOASSGQARMFMPNAPYLPSCLE 23

RESULT 13
US-10-286-333-2
; Sequence 2, Application US/10286333
; Publication No. US20030215458A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Java, No. US20030215458A1
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTL
; FILE REFERENCE: 210121_465C10
; CURRENT APPLICATION NUMBER: US/10/286,333
; CURRENT FILING DATE: 2002-10-30
; NUMBER OF SEQ ID NOS: 506
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Homo sapien
; US-10-286-333-2

Query Match 100.0%; Score 123; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; Indels 0; Gaps 0;
Matches 23; Conservative 0; Mismatches 0;

Qy 1 PSOASSGQARMFMPNAPYLPSCLE 23
Db 1 PSOASSGQARMFMPNAPYLPSCLE 23

RESULT 14
US-10-286-333-3
; Sequence 3, Application US/10286333
; Publication No. US20030215458A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Gaiger, Alexander
; APPLICANT: McNeill, Patricia D.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTL
; FILE REFERENCE: 210121_465C10
; CURRENT APPLICATION NUMBER: US/10/286,333
; CURRENT FILING DATE: 2002-10-30
; NUMBER OF SEQ ID NOS: 506
; SOFTWARE: PastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Mus musculus
; US-10-286-333-3

Query Match 100.0%; Score 123; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; Indels 0; Gaps 0;
Matches 23; Conservative 0; Mismatches 0;

Qy 1 PSOASSGQARMFMPNAPYLPSCLE 23
Db 1 PSOASSGQARMFMPNAPYLPSCLE 23

RESULT 15
US-10-244-830-2
; Sequence 2, Application US/10244830
; Publication No. US20030235557A1
; GENERAL INFORMATION:
; APPLICANT: Gaiger, Alexander
; APPLICANT: Cheever, Martin A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WTL
; TITLE OF INVENTION: SPECIFIC IMMUNOTHERAPY
; FILE REFERENCE: 210121_465C9
; CURRENT APPLICATION NUMBER: US/10/244,830
; CURRENT FILING DATE: 2002-09-16

Query Match 100.0%; Score 123; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; Indels 0; Gaps 0;

Qy 1 PSOASSGQARMFMPNAPYLPSCLE 23
Db 1 PSOASSGQARMFMPNAPYLPSCLE 23

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; NUMBER OF SEQ ID NOS: 468
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO: 2
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Homo sapien
; US-10-244-830-2

Query Match          100.0%; Score 123; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 5e-11; Mismatches 0;
Matches 23; Conservative 0; Indels 0; Gaps 0;
Ov 1 PSQASGQARMFPNAPYLPSCLE 23
Db 1 PSQASGQARMFPNAPYLPSCLE 23

Search completed: November 23, 2005, 05:30:53
Job time : 168 secs

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GenCore version 5.1.6
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OM protein - protein search, using SW model

Run on: November 23, 2005, 05:09:15 ; Search time 47 Seconds
(without alignment)
40.458 Million cell updates/sec

Title: US-09-164-223-2
Perfect score: 123
Sequence: 1 PSQASSGQARMFPNAPYLPSCLE 23

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

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2: /cggn2_6/ptodata/1/iaa/6_COMB.pep:*

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4: /cggn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

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6: /cggn2_6/ptodata/1/iaa/backfilesl.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No. Score Query Match Length DB ID

Description

Result No.	Score	Query	Match	Length	DB	ID	Description
1	123	100.0	154	1	US-09-102-942A-5		Sequence 5, Appli
2	123	100.0	154	2	US-09-037-179B-5		Sequence 5, Appli
3	123	100.0	210	1	US-09-929-315-5		Sequence 5, Appli
4	123	100.0	210	1	US-09-234-783-2		Sequence 2, Appli
5	123	100.0	210	4	US-09-456-907-2		Sequence 2, Appli
6	123	100.0	345	1	US-09-102-942A-2		Sequence 2, Appli
7	123	100.0	345	2	US-09-037-179B-2		Sequence 2, Appli
8	123	100.0	345	2	US-09-929-315-2		Sequence 2, Appli
9	123	100.0	429	1	US-09-234-783-4		Sequence 4, Appli
10	123	100.0	429	1	US-09-456-907-4		Sequence 4, Appli
11	123	100.0	429	4	PCT-AU-05523-4		Sequence 4, Appli
12	123	100.0	449	1	US-09-102-942A-4		Sequence 2, Appli
13	123	100.0	449	1	US-09-037-179B-6		Sequence 2, Appli
14	123	100.0	449	4	US-09-929-315-6		Sequence 4, Appli
15	123	100.0	449	2	US-09-456-907-4		Sequence 4, Appli
16	123	100.0	449	2	US-09-037-179B-6		Sequence 4, Appli
17	123	100.0	449	2	US-09-538-092-960		Sequence 4, Appli
18	123	100.0	449	2	US-09-949-315-4		Sequence 4, Appli
19	123	100.0	449	2	US-09-929-315-5		Sequence 4, Appli
20	123	100.0	559	2	US-09-949-016-9138		Sequence 6, Appli
21	123	100.0	559	2	US-09-949-016-9140		Sequence 6, Appli
22	123	100.0	559	2	US-09-949-016-9141		Sequence 6, Appli
23	123	100.0	576	2	US-09-949-016-9104		Sequence 6, Appli
24	123	100.0	576	2	US-09-949-016-9405		Sequence 6, Appli
25	123	100.0	576	2	US-09-949-016-9406		Sequence 6, Appli
26	123	100.0	576	2	US-09-949-016-9407		Sequence 6, Appli
27	123	100.0	576	2	US-09-949-016-9407		Sequence 6, Appli

ALIGNMENTS

RESULT 1
US-09-102-942A-5
; Sequence 5, Application US/09102942A
; Patent No. 5720288
; GENERAL INFORMATION:
; APPLICANT: Call, Katherine M.
; APPLICANT: Glaser, Thomas M.
; APPLICANT: Ito, Caryn Y.
; APPLICANT: Buckler, Alan J.
; APPLICANT: Peltier, Jerry
; APPLICANT: Haber, Daniel A.
; APPLICANT: Rose, Elise A.
; APPLICANT: Houssain, David E.
; APPLICANT: Bruening, Wendy
; ADDRESS: Darveau, Andre
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: U.S.
; ZIP: 02173
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/102,942A
FILING DATE: 02-AUG-1993
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: MIT-5194A2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-861-6240
TELEFAX: 617-861-9340
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 154 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-102-942A-5

Query Match 100.0%; Score 123; DB 1; Length 154;
 Best Local Similarity 100.0%; Pred. No. 1.9e-11; Indels 0; Gaps 0;
 Matches 23; Conservative 0; Mismatches 0;

Qy	Db	Sequence 5, Application US/09037179B
; Sequence 5, Application US/09037179B		
; Patent No. 6316599		
; GENERAL INFORMATION:		
; APPLICANT: Call, Katherine M.		
; APPLICANT: Glaser, Thomas M.		
; APPLICANT: Ito, Caryn Y.		
; APPLICANT: Pelletier, Alan J.		
; APPLICANT: Haber, Daniel A.		
; APPLICANT: Rose, Elise A.		
; APPLICANT: Housman, David B.		
; APPLICANT: Bruening, Wendy		
; APPLICANT: Darveau, Andre		
; TITLE OF INVENTION: Localization and Characterization of the Wilms, Tumor Gene		
; CURRENT FILING DATE: 1998-03-09		
; FILE REFERENCE: 0050_1312-011		
; CURRENT APPLICATION NUMBER: US/09/037,179B		
; PRIOR APPLICATION NUMBER: US 08/102,942		
; PRIOR FILING DATE: 1993-08-02		
; PRIOR APPLICATION NUMBER: US 07/614,161		
; PRIOR FILING DATE: 1989-11-13		
; PRIOR APPLICATION NUMBER: US 07/795,323		
; PRIOR FILING DATE: 1994-09-27		
; NUMBER OF SEQ ID NOS: 21		
; SOFTWARE: FastSEQ for Windows Version 4.0		
; SEQ ID NO 5		
; LENGTH: 154		
; TYPE: PRT		
; ORGANISM: Homo sapien		
; US-09-037-179B-5		

Query Match 100.0%; Score 123; DB 2; Length 154;
 Best Local Similarity 100.0%; Pred. No. 1.9e-11; Indels 0; Gaps 0;
 Matches 23; Conservative 0; Mismatches 0;

Qy	Db	Sequence 2, Application US/08234783
; Sequence 2, Application US/08234783		
; Patent No. 5622835		
; GENERAL INFORMATION:		
; APPLICANT: Herlyn, Meenhard		
; APPLICANT: Morris, Jennifer		
; APPLICANT: Rauscher III, Frank J.		
; APPLICANT: Rodeck, Ulrich		
; TITLE OF INVENTION: WTI Monoclonal Antibodies and Methods of Use Therefor		
; NUMBER OF SEQUENCES: 7		
; CORRESPONDENCE ADDRESS:		
; ADDRESSEE: Howson and Howson		
; STREET: Spring House Corporate Cntr, PO Box 457		
; CITY: Spring House		
; STATE: Pennsylvania		
; COUNTRY: USA		
; ZIP: 19477		
; COMPUTER READABLE FORM:		
; MEDIUM TYPE: Floppy disk		
; COMPUTER: IBM PC compatible		
; OPERATING SYSTEM: PC-DOS/MS-DOS		
; SOFTWARE: PatentIn Release #1.0, Version #1.25		
; CURRENT APPLICATION DATA:		
; APPLICATION NUMBER: US/08/234,783		
; FILING DATE:		
; CLASSIFICATION: 435		
; ATTORNEY/AGENT INFORMATION:		
; NAME: Bak, Mary E.		
; REGISTRATION NUMBER: 31,215		
; REFERENCE/DOCKET NUMBER: WST48USA		
; TELECOMMUNICATION INFORMATION:		
; TELEPHONE: 215-540-9200		
; TELEFAX: 215-540-5818		
; INFORMATION FOR SEQ ID NO: 2:		
; SEQUENCE CHARACTERISTICS:		
; LENGTH: 210 amino acids		
; TYPE: amino acid		
; TOPOLOGY: linear		
; MOLECULE TYPE: protein		
; US-08-234-783-2		

Query Match 100.0%; Score 123; DB 1; Length 210;
 Best Local Similarity 100.0%; Pred. No. 2.7e-11;

Query Match 100.0%; Score 123; DB 1; Length 154;
 Best Local Similarity 100.0%; Pred. No. 1.9e-11; Indels 0; Gaps 0;
 Matches 23; Conservative 0; Mismatches 0;

Qy	Db	Sequence 5, Application US/0929315
; Sequence 5, Application US/0929315		
; Patent No. 6343011		
; GENERAL INFORMATION:		
; APPLICANT: Call, Katherine M.		
; APPLICANT: Glaser, Thomas M.		
; APPLICANT: Ito, Caryn Y.		
; APPLICANT: Buckler, Alan J.		
; APPLICANT: Pelletier, Jerry		
; APPLICANT: Haber, Daniel A.		
; APPLICANT: Rose, Elise A.		
; APPLICANT: Houman, David E.		
; APPLICANT: Bruening, Wendy		
; APPLICANT: Darveau, Andre		
; TITLE OF INVENTION: Localization and Characterization of the Wilms, Tumor Gene		
; CURRENT APPLICATION NUMBER: US/09/929,315		

Matches 23; **Conservative** 0; **Mismatches** 0; **Indels** 0; **Gaps** 0;
Db
Qy 1 PSQASSGQARMFPNAPYLPSCLE 23
Db 128 PSQASSGQARMFPNAPYLPSCLE 150

RESULT 5
US-08-456-907-2
Sequence 2, Application US/08456907
Patent No. 5633142
GENERAL INFORMATION:
APPLICANT: Herilyn, Meenhard
APPLICANT: Morris, Jennifer
APPLICANT: Rauscher III, Frank J.
APPLICANT: Rodde, Ulrich
TITLE OF INVENTION: Wt1 Monoclonal Antibodies and Methods of
TITLE OF INVENTION: Use Therefor
NUMBER OF SEQUENCES: 7
ZIP: 19477
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US 08/234, 783
FILING DATE: 28-APR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Bak, Mary E.
REGISTRATION NUMBER: 31, 215
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/234, 783
FILING DATE: 28-APR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Bak, Mary E.
REGISTRATION NUMBER: 31, 215
REFERENCE/DOCKET NUMBER: WST48USA
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-540-9200
TELEFAX: 215-540-5818
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 210 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
Db PCT-US95-05523-2

RESULT 6
US-08-456-907-2
Sequence 2, Application US/08456907
Patent No. 5633142
GENERAL INFORMATION:
APPLICANT: Call, Katherine M.
APPLICANT: Glaser, Thomas M.
APPLICANT: Ito, Caryn Y.
APPLICANT: Buckler, Alan J.
APPLICANT: Pelletier, Jerry
APPLICANT: Haber, Daniel A.
APPLICANT: Rose, Elise A.
APPLICANT: Housman, David E.
APPLICANT: Darveau, Andre
APPLICANT: Bruning, Wendy
APPLICANT: Housman, David E.
APPLICANT: Darveau, Andre
APPLICANT: Bruning, Wendy
TITLE OF INVENTION: Localization and Characterization of the
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
STREET: Two Milvia Drive
CITY: Lexington
STATE: Massachusetts
ZIP: 02173
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/102, 942A
FILING DATE: 02-AUG-1993

CLASSIFICATION: 5330
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: MIT-5194A2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-861-6440
TELEFAX: 617-861-9540
SEQUENCE FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 345 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-102-942A-2

RESULT 8
Query Match 100.0%; Score 123; DB 1; Length 345;
Best Local Similarity 100.0%; Pred. No. 4.7e-11;
Matches 23; Conservative 0; Mismatches 0;
Indels 0; Gaps 0;

Qy 1 PSQASSGQARNFPNAPYLPSCLE 23
Db 33 PSQASSGQARNFPNAPYLPSCLE 55

RESULT 9
US-09-037-179B-2
Sequence 2, Application US/09037179B
Patent No. 6316599
GENERAL INFORMATION:
APPLICANT: Call, Katherine M.
APPLICANT: Glaser, Thomas M.
APPLICANT: Ito, Caryn Y.
APPLICANT: Buckler, Alan J.
APPLICANT: Pelletier, Jerry
APPLICANT: Haber, Daniel A.
APPLICANT: Rose, Elise A.
APPLICANT: Housman, David E.
APPLICANT: Bruening, Wendy
APPLICANT: Darveau, Andre
TITLE OF INVENTION: Localization and Characterization of the Wilms Tumor Gene
FILE REFERENCE: 0050.1312-013
CURRENT APPLICATION NUMBER: US/09/929.315
CURRENT FILING DATE: 2001-03-14
PRIOR APPLICATION NUMBER: US 09/037,179
PRIOR FILING DATE: 1998-03-09
PRIOR APPLICATION NUMBER: US 08/102,942
PRIOR FILING DATE: 1993-08-02
PRIOR APPLICATION NUMBER: US 07/614,161
PRIOR FILING DATE: 1990-11-13
PRIOR APPLICATION NUMBER: US 07/435,780
PRIOR FILING DATE: 1989-11-13
PRIOR APPLICATION NUMBER: US 07/795,323
PRIOR FILING DATE: 1991-11-20
NUMBER OF SEQ ID NOS: 21
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 345
TYPE: PRT
ORGANISM: Homo sapien
US-09-929-315-2

Query Match 100.0%; Score 123; DB 2; Length 345;
Best Local Similarity 100.0%; Pred. No. 4.7e-11;
Matches 23; Conservative 0; Mismatches 0;
Indels 0; Gaps 0;

Qy 1 PSQASSGQARNFPNAPYLPSCLE 23
Db 33 PSQASSGQARNFPNAPYLPSCLE 55

RESULT 10
US-08-234-783-4
Sequence 4, Application US/08234783
Patent No. 5622335
GENERAL INFORMATION:
APPLICANT: Hellyn, Meenhard
APPLICANT: Morris, Jennifer
APPLICANT: Rauscher III, Frank J.
APPLICANT: Rodeck, Ulrich
TITLE OF INVENTION: WT1 Monoclonal antibodies and Methods of Use Therefor
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE: Howson and Howson
STREET: Spring House Corporate Cntr, PO Box 457
CITY: Spring House
STATE: Pennsylvania
COUNTRY: USA
ZIP: 19477

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/234,783
FILING DATE: 1993-09-27
CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

RESULT 9
US-09-929-315-2
Sequence 2, Application US/09037179B

```

NAME: Bak, Mary E.
REGISTRATION NUMBER: 31,215
REFERENCE/DOCKET NUMBER: WST48USA
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-540-9200
TELEFAX: 215-540-5818
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 429 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-234-783-4

RESULT 11
Query Match          100.0%; Score 123; DB 1; Length 429;
Best Local Similarity 100.0%; Pred. No. 6e-11; 0; Mismatches
Matches 23; Conservative 0; Indels 0; Gaps 0;
Qy      1 PSQASSGQARMFPNAPYLPSCLE 23
Db      117 PSQASSGQARMFPNAPYLPSCLE 139

RESULT 12
PCT-US95-05523-4
Sequence 4, Application PCT/TU9505523
GENERAL INFORMATION:
APPLICANT: The Wistar Institute of Anatomy and Biology
TITLE OF INVENTION: WTL Monoclonal Antibodies and Methods of Use Therefor
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE: Howson and Howson
STREET: Spring House Corporate Cntr, PO Box 457
CITY: Spring House
STATE: Pennsylvania
COUNTRY: USA
ZIP: 19477
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/05523
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/234,783
FILING DATE: 28-APR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Bak, Mary E.
REGISTRATION NUMBER: 31,215
REFERENCE/DOCKET NUMBER: WST48PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-540-9200
TELEFAX: 215-540-5818
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 429 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US95-05523-4

RESULT 13
US-08-102-942A-4
Sequence 4, Application US/08102942A
Patent No. 5,262,88
GENERAL INFORMATION:
APPLICANT: Call, Katherine M.
APPLICANT: Glader, Thomas M.
APPLICANT: Ito, Caryn Y.
APPLICANT: Buckler, Alan J.
APPLICANT: Pelletier, Jerry
APPLICANT: Haber, Daniel A.
APPLICANT: Rose, Elise A.
APPLICANT: Housman, David E.
APPLICANT: Bruening, Wendy
APPLICANT: Darveau, Andre
TITLE OF INVENTION: Localization and Characterization of the
TITLE OF INVENTION: Wilms' Tumor Gene

```

NUMBER OF SEQUENCES: 8
 CORRESPONDENCE ADDRESS: ADDRESSE: Hamilton, Brook, Smith & Reynolds, P.C.
 STREET: Two Militia Drive
 CITY: Lexington
 STATE: Massachusetts
 COUNTRY: U.S.
 ZIP: 02173

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/102,942A
 FILING DATE: 02-AUG-1993
 CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:
 NAME: Granahan, Patricia
 REGISTRATION NUMBER: 32,227
 REFERENCE/DOCKET NUMBER: MIT-5194A2

TELECOMMUNICATION INFORMATION:
 TELEPHONE: 617-861-6240
 TELEFAX: 617-861-9540

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:
 LENGTH: 449 amino acids
 STRANDEDNESS: not relevant
 TOPOLogy: linear
 MOLECULE TYPE: protein

RESULT 14
 US-08-102-942A-6
 Sequence 6, Application US/08102942A
 ; Patent No. 572628B
 ; GENERAL INFORMATION:
 ; APPLICANT: Call, Katherine M.
 ; APPLICANT: Glaser, Thomas M.
 ; APPLICANT: Ito, Caryn Y.
 ; APPLICANT: Buckler, Alan J.
 ; APPLICANT: Pelletier, Jerry
 ; APPLICANT: Haber, Daniel A.
 ; APPLICANT: Rose, Elise A.
 ; APPLICANT: Housman, David E.
 ; APPLICANT: Bruening, Wendy
 ; APPLICANT: Darveau, Andre
 ; TITLE OF INVENTION: Localization and Characterization of the
 ; TITLE OF INVENTION: Wilms Tumor Gene
 ; FILE REFERENCE: 0050_1312-011
 ; CURRENT APPLICATION NUMBER: US/09/037,179B
 ; CURRENT FILING DATE: 1998-03-09
 ; PRIORITY APPLICATION NUMBER: US 08/102,942
 ; PRIORITY FILING DATE: 1993-08-02
 ; PRIORITY APPLICATION NUMBER: US 07/614,161
 ; PRIORITY FILING DATE: 1990-11-13
 ; PRIORITY APPLICATION NUMBER: US 07/435,780
 ; PRIORITY FILING DATE: 1989-11-13
 ; PRIORITY APPLICATION NUMBER: US 07/795,323
 ; PRIORITY FILING DATE: 1994-09-27
 ; NUMBER OF SEQ ID NOS: 21
 ; SOFTWARE: FastSBQ for Windows Version 4.0
 ; LENGTH: 449
 ; TYPE: PRT
 ; ORGANISM: Unknown
 ; FEATURE:
 ; OTHER INFORMATION: Murine

US-08-102-942A-4

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 Best Local Similarity 100.0%; Pred. No. 6.3e-11;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1 PSQASSGQARMFPNAPYLPSCLE 23
Db	117 PSQASSGQARMFPNAPYLPSCLE 139

RESULT 15
 US-09-037-179B-4
 Sequence 4, Application US/09037179B
 ; Patent No. 6316599
 ; GENERAL INFORMATION:
 ; APPLICANT: Call, Katherine M.
 ; APPLICANT: Glaser, Thomas M.
 ; APPLICANT: Ito, Caryn Y.
 ; APPLICANT: Buckler, Alan J.
 ; APPLICANT: Pelletier, Jerry
 ; APPLICANT: Haber, Daniel A.
 ; APPLICANT: Rose, Elise A.
 ; APPLICANT: Housman, David E.
 ; APPLICANT: Bruening, Wendy
 ; APPLICANT: Darveau, Andre
 ; TITLE OF INVENTION: Localization and Characterization of the
 ; TITLE OF INVENTION: Wilms Tumor Gene
 ; FILE REFERENCE: 0050_1312-011
 ; CURRENT APPLICATION NUMBER: US/09/037,179B
 ; CURRENT FILING DATE: 1998-03-09
 ; PRIORITY APPLICATION NUMBER: US 08/102,942
 ; PRIORITY FILING DATE: 1993-08-02
 ; PRIORITY APPLICATION NUMBER: US 07/614,161
 ; PRIORITY FILING DATE: 1990-11-13
 ; PRIORITY APPLICATION NUMBER: US 07/435,780
 ; PRIORITY FILING DATE: 1989-11-13
 ; PRIORITY APPLICATION NUMBER: US 07/795,323
 ; PRIORITY FILING DATE: 1994-09-27
 ; NUMBER OF SEQ ID NOS: 21
 ; SOFTWARE: FastSBQ for Windows Version 4.0
 ; LENGTH: 449
 ; TYPE: PRT
 ; ORGANISM: Unknown
 ; FEATURE:
 ; OTHER INFORMATION: Murine

US-09-037-179B-4

Query Match 100.0%; Score 123; DB 2; Length 449;
 Best Local Similarity 100.0%; Pred. No. 6.3e-11;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1 PSQASSGQARMFPNAPYLPSCLE 23
Db	117 PSQASSGQARMFPNAPYLPSCLE 139

Fri Nov 25 17:46:07 2005

us-09-164-223-2.rai

Page 7

Search completed: November 23, 2005, 05:18:06
Job time : 47 sec

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GenCore version 5.1.6
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Om protein - protein search, using bw model

Run on: November 23, 2005, 05:17:31 ; Search time 8 Seconds
(without alignments)
8.714 Million cell updates/sec

Title: US-09-164-223-2
Perfect score: 123
Sequence: 1 PSQASSGQARMFPNAPYLPSCLE 23

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 17545 seqs, 3030971 residues

Total number of hits satisfying chosen parameters: 17545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA New: *

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2: /cgn2_6/ptodata/2/pubseq/US06_NEW_PUB.pep: *
3: /cgn2_6/ptodata/2/pubseq/US07_NEW_PUB.pep: *
4: /cgn2_6/ptodata/2/pubseq/US08_NEW_PUB.pep: *
5: /cgn2_6/ptodata/2/pubseq/US09_NEW_PUB.pep: *
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	43.5	35.4	32	1 US-10-945-853-9
2	43.5	35.4	188	1 US-10-945-853-1
3	43.5	35.4	188	1 US-10-945-853-2
4	42	34.1	101	1 US-10-945-853-6
5	41	33.3	2630	7 US-11-186-731-2
6	41	33.3	7968	7 US-11-186-731-5
7	38	30.9	249	7 US-11-054-515-714
8	38	30.9	249	7 US-11-054-515-738
9	38	30.9	249	7 US-11-054-515-160
10	38	30.9	318	1 US-10-821-234-117
11	38	30.9	1970	1 US-10-821-234-1641
12	37.5	30.5	216	1 US-10-667-295-105
13	37	30.5	282	1 US-10-667-295-104
14	37	30.1	147	1 US-10-723-626-2238
15	37	30.1	247	1 US-10-131-826A-2884
16	37	30.1	249	7 US-11-054-515-388
17	37	30.1	249	7 US-11-054-515-310
18	37	30.1	249	7 US-11-054-515-470
19	37	30.1	249	7 US-11-054-515-769
20	37	30.1	344	1 US-10-821-234-911
21	37	30.1	543	1 US-10-495-664-3
22	36	29.3	14	7 US-11-054-515-271
23	36	29.3	249	7 US-11-054-515-371
24	36	29.3	249	7 US-11-054-515-593
25	36	29.3	1	US-10-828-033-25
36	37	30.1	249	7 US-11-054-515-593
37	37	30.1	344	1 US-10-821-234-911
38	37	30.1	543	1 US-10-495-664-3
39	37	30.1	249	7 US-11-054-515-271
40	37	30.1	249	7 US-11-054-515-371
41	37	30.1	249	7 US-11-054-515-593
42	35	28.5	249	7 US-11-054-515-666
43	35	28.5	249	7 US-11-054-515-717
44	35	28.5	249	7 US-11-054-515-736
45	34	27.6	14	7 US-11-054-515-2672

ALIGNMENTS

RESULT 1
US-10-945-853-9
; Sequence 9, Application US/10945853
; Publication No. US20050255117A1
; GENERAL INFORMATION:
; APPLICANT: Biogen, Inc.
; APPLICANT: Sanicola-Nadel, Michele
; APPLICANT: Adkins, Heather
; APPLICANT: Miklasz, Steven Donald
; APPLICANT: Rayhorn, Paul
; APPLICANT: Schiff, Susan Gail
; APPLICANT: Williams, Kevin
; TITLE OF INVENTION: Cripto-specific Antibodies
; FILE REFERENCE: BSWA11CPCCN
; CURRENT FILING DATE: 2004-09-20
; PRIOR APPLICATION NUMBER: PCT/US02/31462
; PRIOR FILING DATE: 2002-10-01
; PRIOR APPLICATION NUMBER: 60/286,782
; PRIOR FILING DATE: 2001-04-26
; PRIOR APPLICATION NUMBER: 60/293,020
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: 60/301,091
; PRIOR FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: 60/3367,002
; PRIOR FILING DATE: 2002-03-22
; NUMBER OF SEQ ID NOS: 9
; SEQ ID NO: 9
; LENGTH: 32
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: Mod_res
; LOCATION: 1
; OTHER INFORMATION: N-terminal acetylation
US-10-945-853-9
Query Match 35.4%; Score 43.5%; DB 1; Length 32;
Best Local Similarity 60.0%; Pred. No. 0.26; Mismatches 4; Indels 1; Gaps 1;
Matches 9; Conservative 1; MisMatches 1; Best Local Similarity 60.0%; Pred. No. 0.26; Mismatches 4; Indels 1; Gaps 1;

Qy 7 GOARMFPNAPYLPSCL 21
Db 18 GQLRCPPQA-FLPGC 31
Sequence 593, App
Sequence 25, App

RESULT 2 ; SEQ ID NO 2
 US-10-945-853-1 ; LENGTH: 188
 ; Sequence 1, Application US/10945853
 ; Publication No. US2005025517A1
 ; GENERAL INFORMATION:
 APPLICANT: Biogen, Inc.
 APPLICANT: Sancilio-Hadel, Michele
 APPLICANT: Adkins, Heather
 APPLICANT: Miklasz, Steven Donald
 APPLICANT: Rayhorn, Paul
 APPLICANT: Schiffer, Susan Gail
 APPLICANT: Williams, Kevin
 TITLE OF INVENTION: Crypto-Specific Antibodies
 FILE REFERENCE: BGNAL17CPPCN
 CURRENT APPLICATION NUMBER: US/10/945, 853
 CURRENT FILING DATE: 2004-09-20
 PRIOR APPLICATION NUMBER: PCT/US02/31462
 PRIOR FILING DATE: 2002-10-01
 PRIOR APPLICATION NUMBER: PCT/US02/11950
 PRIOR FILING DATE: 2002-04-17
 PRIOR APPLICATION NUMBER: 60/285, 782
 PRIOR FILING DATE: 2001-04-26
 PRIOR APPLICATION NUMBER: 60/293, 020
 PRIOR FILING DATE: 2001-05-17
 PRIOR APPLICATION NUMBER: 60/301, 091
 PRIOR FILING DATE: 2001-06-26
 PRIOR APPLICATION NUMBER: 60/367,,002
 PRIOR FILING DATE: 2002-03-22
 NUMBER OF SEQ ID NOS: 9
 SEQ ID NO 1
 LENGTH: 188
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-10-945-853-1

Query Match 35.4%; Score 43.5; DB 1; Length 188;
 Best Local Similarity 60.0%; Pred. No. 1.7; Mismatches 9;
 Matches 1; Indels 1; Gaps 1;

Qy	7	GQARMFPNAPYLPSCL	149
Db	136	GQLRCFFQAF-LPLGCL	149

RESULT 3 US-10-945-853-2
 ; Sequence 2, Application US/10945853
 ; Publication No. US2005025517A1
 ; GENERAL INFORMATION:
 APPLICANT: Biogen, Inc.
 APPLICANT: Sancilio-Hadel, Michele
 APPLICANT: Adkins, Heather
 APPLICANT: Miklasz, Steven Donald
 APPLICANT: Rayhorn, Paul
 APPLICANT: Schiffer, Susan Gail
 APPLICANT: Williams, Kevin
 TITLE OF INVENTION: Crypto-Specific Antibodies
 FILE REFERENCE: BGNAL17CPPCN
 CURRENT APPLICATION NUMBER: US/10/945, 853
 CURRENT FILING DATE: 2004-09-20
 PRIOR APPLICATION NUMBER: PCT/US02/31462
 PRIOR FILING DATE: 2002-10-01
 PRIOR APPLICATION NUMBER: PCT/US02/11950
 PRIOR FILING DATE: 2002-04-17
 PRIOR APPLICATION NUMBER: 60/285, 782
 PRIOR FILING DATE: 2001-04-26
 PRIOR APPLICATION NUMBER: 60/293, 020
 PRIOR FILING DATE: 2001-05-17
 PRIOR APPLICATION NUMBER: 60/301, 091
 PRIOR FILING DATE: 2001-06-26
 PRIOR APPLICATION NUMBER: 60/367,,002
 PRIOR FILING DATE: 2002-03-22
 NUMBER OF SEQ ID NOS: 9
 SEQ ID NO 1
 LENGTH: 188
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-10-945-853-1

RESULT 4 US-10-793-626-926 ; SEQ ID NO 2
 ; Sequence 926, Application US/0793626
 ; Publication No. USZ20050255478A1
 ; GENERAL INFORMATION:
 APPLICANT: KIMMERMER, WILLIAM JOHN
 TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
 FILE REFERENCE: PU480US
 CURRENT APPLICATION NUMBER: US/10/793, 926
 CURRENT FILING DATE: 2004-03-04
 PRIOR APPLICATION NUMBER: 60/164, 258
 PRIOR FILING DATE: 1999-11-09
 NUMBER OF SEQ ID NOS: 4472
 SOFTWARE: Patentin Ver. 2.1
 SEQ ID NO 926
 LENGTH: 101
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: synthetic
 OTHER INFORMATION: amino acid sequence
 US-10-793-626-926

Query Match 35.4%; Score 43.5; DB 1; Length 188;
 Best Local Similarity 60.0%; Pred. No. 1.7; Mismatches 9;
 Matches 1; Indels 1; Gaps 1;

Qy	7	GQARMFPNAPYLPSCL	149
Db	136	GQLRCFFQAF-LPLGCL	149

RESULT 5 US-11-186-731-2
 ; Sequence 2, Application US/11186731
 ; Publication No. US20050255521A1
 ; GENERAL INFORMATION:
 APPLICANT: Kapeller-Libermann, Rosana
 APPLICANT: Acton, Susan L.
 TITLE OF INVENTION: 59079 and 12599, Protein Kinase Family
 TITLE OF INVENTION: Members and Uses Therefor
 FILE REFERENCE: MPI2001-047PPRCP1(M)
 CURRENT APPLICATION NUMBER: US/11/186,731
 CURRENT FILING DATE: 2005-07-21
 PRIOR APPLICATION NUMBER: US/10/077,130
 PRIOR FILING DATE: 2002-02-15
 PRIOR APPLICATION NUMBER: 60/269201
 PRIOR FILING DATE: 2001-02-15
 NUMBER OF SEQ ID NOS: 9
 SOFTWARE: PastSeq for Windows Version 4.0
 SEQ ID NO 2
 LENGTH: 2630
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-11-186-731-2

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 Best Local Similarity 43.8%; Pred. No. 64;

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Matches    7;  Conservative   4;  Mismatches   5;  Indels   0;  Gaps   0;
Qy          1  PSQOASSQARNFPNAP 16
Db          1636  PSSSEACCEAQRIAPSAP 1651
; GENERAL INFORMATION:
; APPLICANT: Action, Susan L.
; TITLE OF INVENTION: Members and Uses Therefor
; FILE REFERENCE: MPI2001-047PIRCPI(M)
; CURRENT APPLICATION NUMBER: US/11/186,731
; CURRENT FILING DATE: 2005-07-21
; PRIORITY APPLICATION NUMBER: US/10/077,130
; PRIORITY FILING DATE: 2002-02-15
; PRIORITY APPLICATION NUMBER: 60/269201
; PRIORITY FILING DATE: 2001-02-15
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO: 5
; LENGTH: 7968
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-11-186-731-5

RESULT 7
Query Match      33.3%; Score 41; DB 7; Length 7968;
Best Local Similarity 43.8%; Pred. No. 2.1e+02;
Matches    7; Conservative   4; Mismatches   5; Indels   0; Gaps   0;
Qy          1  PSQOASSQARNFPNAP 16
Db          6974  PSSBACGEBAQRLPSAP 6989
; CURRENT APPLICATION NUMBER: US/11/054,515
; CURRENT FILING DATE: 2005-07-21
; PRIORITY APPLICATION NUMBER: 60/331,469
; PRIORITY FILING DATE: 2001-11-16
; PRIORITY APPLICATION NUMBER: 60/340,817
; PRIORITY FILING DATE: 2001-12-19
; PRIORITY APPLICATION NUMBER: 60/580,347
; PRIORITY FILING DATE: 2004-06-18
; PRIORITY APPLICATION NUMBER: 10/293,418
; PRIORITY FILING DATE: 2002-11-14
; PRIORITY APPLICATION NUMBER: 60/331,469
; PRIORITY FILING DATE: 2001-05-25
; PRIORITY APPLICATION NUMBER: 60/277,379
; PRIORITY FILING DATE: 2001-03-21
; PRIORITY APPLICATION NUMBER: 60/276,248
; PRIORITY FILING DATE: 2001-03-16
; PRIORITY APPLICATION NUMBER: 60/293,499
; PRIORITY FILING DATE: 2000-10-17
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 3247
; SEQ ID NO: 738
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-11-054,515-738

RESULT 8
Query Match      30.9%; Score 38; DB 7; Length 249;
Best Local Similarity 50.0%; Pred. No. 15;
Matches    8; Conservative   1; Mismatches   7; Indels   0; Gaps   0;
Qy          4  ASSGQARNFPNAPYL 19
Db          97  ARSRDILFLPNPLSP 112
; CURRENT APPLICATION NUMBER: US/11/054,515-714
; CURRENT FILING DATE: 2005-02-10
; PRIORITY APPLICATION NUMBER: 60/543,296
; PRIORITY FILING DATE: 2004-02-11
; PRIORITY APPLICATION NUMBER: 60/340,817
; PRIORITY FILING DATE: 2001-12-19
; PRIORITY APPLICATION NUMBER: 60/580,347
; PRIORITY FILING DATE: 2004-06-18
; PRIORITY APPLICATION NUMBER: 10/293,418
; PRIORITY FILING DATE: 2002-11-14
; PRIORITY APPLICATION NUMBER: 60/331,469
; PRIORITY FILING DATE: 2001-11-16
; PRIORITY APPLICATION NUMBER: 60/340,817
; PRIORITY FILING DATE: 2001-12-19
; PRIORITY APPLICATION NUMBER: 60/580,347
; PRIORITY FILING DATE: 2004-06-18
; PRIORITY APPLICATION NUMBER: 10/293,418
; PRIORITY FILING DATE: 2002-11-14
; PRIORITY APPLICATION NUMBER: 60/331,469
; PRIORITY FILING DATE: 2001-05-25
; PRIORITY APPLICATION NUMBER: 60/277,379
; PRIORITY FILING DATE: 2001-03-21
; PRIORITY APPLICATION NUMBER: 60/276,248
; PRIORITY FILING DATE: 2001-03-16
; PRIORITY APPLICATION NUMBER: 60/293,499
; PRIORITY FILING DATE: 2000-10-17
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 3247
; SEQ ID NO: 738
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-11-054,515-738

RESULT 9
Query Match      30.9%; Score 38; DB 7; Length 249;
Best Local Similarity 50.0%; Pred. No. 15;
Matches    8; Conservative   1; Mismatches   7; Indels   0; Gaps   0;
Qy          4  ASSGQARNFPNAPYL 19
Db          97  ARSRDILFLPNPLSP 112
; CURRENT APPLICATION NUMBER: US/11/054,515
; CURRENT FILING DATE: 2005-02-10
; PRIORITY APPLICATION NUMBER: 60/543,296
; PRIORITY FILING DATE: 2004-02-11
; PRIORITY APPLICATION NUMBER: 60/340,817
; PRIORITY FILING DATE: 2001-12-19
; PRIORITY APPLICATION NUMBER: 60/580,347
; PRIORITY FILING DATE: 2004-06-18
; PRIORITY APPLICATION NUMBER: 10/293,418
; PRIORITY FILING DATE: 2002-11-14
; PRIORITY APPLICATION NUMBER: 60/331,469
; PRIORITY FILING DATE: 2001-11-16
; PRIORITY APPLICATION NUMBER: 60/340,817
; PRIORITY FILING DATE: 2001-12-19
; PRIORITY APPLICATION NUMBER: 60/580,347
; PRIORITY FILING DATE: 2004-06-18
; PRIORITY APPLICATION NUMBER: 10/293,418
; PRIORITY FILING DATE: 2002-11-14
; PRIORITY APPLICATION NUMBER: 60/331,469
; PRIORITY FILING DATE: 2001-05-25
; PRIORITY APPLICATION NUMBER: 60/277,379
; PRIORITY FILING DATE: 2001-03-21
; PRIORITY APPLICATION NUMBER: 60/276,248
; PRIORITY FILING DATE: 2001-03-16
; PRIORITY APPLICATION NUMBER: 60/293,499
; PRIORITY FILING DATE: 2000-10-17
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 3247
; SEQ ID NO: 738
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-11-054,515-738

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; SEQ ID NO: 104
; LENGTH: 282
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)..(282)
; OTHER INFORMATION: Ceres Seq. ID no. 12431632
; US-10-667-295-104

Query Match      30.5%; Score 37.5; DB 1; Length 282;
Best Local Similarity 34.8%; Pred. No. 21; Mismatches 8; Conservative 8; Indels 6; Gaps 3; Gaps 1;
Matches          10; Conservative 10; Mismatches 5; Indels 6; Gaps 3; Gaps 1;

Qy   2  SQASSGQARMFPNAPYL---PSC 21
Db   94  SITTSGKPKWFFPSKNFISMPFSC 116

RESULT 14
US-10-793-626-223B
; Sequence 223B, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMELER, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU4880US
; CURRENT APPLICATION NUMBER: US/10/793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO: 223B
; LENGTH: 147
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; US-10-793-626-223B

Query Match      30.1%; Score 37; DB 1; Length 147;
Best Local Similarity 45.5%; Pred. No. 13; Mismatches 10; Conservative 10; Indels 5; Gaps 6; Gaps 1;
Matches          10; Conservative 10; Mismatches 5; Indels 6; Gaps 6; Gaps 1;

Qy   1  PSQASGQ---ARMFPNAP 16
Db   35  PSELGGQRQRTSAAARAFINLP 56

RESULT 15
US-10-131-826A-284
; Sequence 284, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Duforge, Laura
; APPLICANT: Desnoyer, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zenin

Query Match      30.1%; Score 37; DB 1; Length 247;
Best Local Similarity 27.8%; Pred. No. 22; Mismatches 5; Conservative 5; Indels 7; Gaps 0; Gaps 0;
Matches          10; Conservative 10; Mismatches 5; Indels 7; Gaps 0; Gaps 0;

Qy   4  ASQSGQARMFPNAPYLPSC 21
Db   126  AMNGEGVLYPSELFTPEC 143

Search completed: November 23, 2005, 05:31:08
Job time : 9 secs

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